

How Educating a Girl Changes the Woman She Becomes: An Intergenerational Study in Northern Ghana

ABEL Technical Paper No. 8

Prepared by:

Joyce Wolf
and
Martina Odonkor

Prepared for the Office of Sustainable Development
Bureau for Africa
U.S. Agency for International Development

1997

USAID's Advancing Basic Education and Literacy (ABEL) Project prepared this product with funding and guidance from USAID's Bureau for Africa. The work was performed by the Academy for Educational Development and Creative Associates International, Inc.

The findings, conclusions, and recommendations expressed in this product are the authors' and do not necessarily reflect the opinions of any of the institutions associated with the ABEL Project or the U.S. Agency for International Development.

Material may be reproduced if full credit is given.

ABEL Project number 936-5832
Contract numbers HNE-5832-C-00-4075-00 (core)
and HNE-5832-Q-00-4076-00 (requirements)

Foreword

For the last 10 years, funding agencies and their African partners have focused on improving basic education as key to the development process. During the same period, research on the important benefits to society created by educated women has kindled interest in educating girls.

This report explores the relationship between educating girls and the benefits to society that result. Both quantitative and qualitative methodologies serve to examine concretely what does and does not change when girls go to school. The report also explores the questions of why education makes a difference, what educated women do differently, and how they do it.

We hope these findings will provide a better understanding of the process by which educating a girl changes the behavior of the woman she becomes, and that this understanding will enable all of us to improve our efforts to support girls' education.

--Julie Owen-Rea
Education & Training Officer
Division of Human Resources & Democracy
Office of Sustainable Development

Acknowledgments

The authors are deeply indebted to the Thomas Tia Sulemana family for the time, interest, and cooperation that made this study possible. We also appreciated the interviewing assistance given by Yaa Oppong, the translation assistance provided by Anatu Tia Sulemana, and the immense coding job conducted by Barbara Reese.

This study was made possible in part through funding from the United States Agency for International Development, Africa Bureau, Office of Sustainable Development.

Contents

I. Introduction	1
A. Why This Research Was Conducted	1
B. Methodology	2
Map 1: Location of the Dagomba People in Ghana	4
Map 2: Family Relationships Among Interviewees	5
II. Context	6
A. The Chief	6
Chart 1: Percent of Ghanaian Boys 6-14 Years Old Enrolled in Primary School in 1960	8
Chart 2: Girls' Enrollment as Percent of Total Enrollment in 1994-95	8
B. The Chief's Older Sister	10
Chart 3: Percent of Fostered Women and Men According to Age Category	11
Chart 4: Mean Years of Education for Fostered and Not Fostered Children	13
C. The Fostered Daughter	13
D. The Educated Wife	15
E. An Educated Woman	17
III. The Impact of Girls' Education	20
A. Fertility	20
Chart 5: Mean Number of Years Away from Husband After Birth of Child	20
Chart 6: Average Number of Children Desired	22
Chart 7: Average Number of Child Births According to Age Category	22
Chart 8: Average Number of Children Desired According to Age Category	23
Chart 9: Mean Number of Children Born and Mean Number of Children Desired According to Education	24
B. Child Health	24
Chart 10: Mean Number of Children Who Have Died by Five Years and Child Mortality Rate According to Parents' Education	25
Chart 11: Child Mortality Rate by Five Years According to Mother's Age Category	26
Chart 12: Child Mortality Rate by Age Five Years According to Mother's Age Category and Education	27
C. Child Education	27
Chart 13: Mean Percent of Brothers and Sisters with No Education, Primary Education, and More Than Primary Education According to Age Category	28

	Chart 14: Mean Percent of Children Sent to School by Parents According to Education	29
D.	Koranic Education	31
	Chart 15: Women and Men with No Education, Koranic Education, or Formal Education	31
	Chart 16: Comparative Social Impacts of No Education, Koranic Education, and Formal Education	32
IV.	How Does Education Change the Girl and Her Life?	34
A.	Marriage	34
	Chart 17: Women's and Men's Reasons for Their First Marriage According to Education	35
	Chart 18: Women's Position in First Marriage According to Education	37
	Chart 19: Reasons for the End of First Marriage	38
	Chart 20: Number of Marriages According to Education	41
B.	Status and Decision-making Power	42
	Chart 21: Relationship Between Education and Decision-Making Power According to Education	45
	Chart 22: Who Makes Decisions About Type of Child Birth Assistance According to Education	47
	Chart 23: Who Makes Decisions About Treatment for a Sick Child According to Education	47
	Chart 24: Who Makes Decisions About Child Immunization According to Education	47
	Chart 25: Who Makes Decisions About Contraception Use According to Education	48
	Chart 26: Percent of Men and Women Who Have Not Discussed Child Spacing with Spouse According to Education	49
	Chart 27: Who Makes Decisions About Child Education According to Education	52
	Chart 28: Who Pays for Treatment for Child's Diarrhea According to Education	53
	Chart 29: Who Pays for Child's Education According to Education	53
C.	The Content of Education	54
	Chart 30: How Education Is Said to Be Useful According to Education	55
	Chart 31: Mean Number of Contraception Techniques Known According to Education	57
	Chart 32: Percent Who Speak English According to Education	59
	Chart 33: Where Women and Men Learned About Treatment for Diarrhea According to Education	60
	Chart 34: Treatment for Child with Diarrhea According to Education	61

V. Conclusion	64
A. Context Counts	64
B. Impacts of Girls' Education	64
C. How Does Girls' Education Produce These Impacts?	65
VI. References	68

I. Introduction

A. Why This Research Was Conducted

Research involving girls' education in the late 1980s and early 1990s focused on the impacts of that education on both economic and social factors. Once the impact of girls' education appeared to be well documented, research efforts shifted to barriers to girls' access to school and their achievement once in school. Left relatively unexplored was the question of *why* girls' education has the impacts that have been reported. A better understanding of what it is about education that changes girls can guide decisions about the type of education to offer and strategies for overcoming barriers to access and achievement.

This research investigates what changes when a girl receives an education that leads her to become a woman who has fewer, healthier, and better educated children. The emphasis is on the process of how education can have an impact. The study is divided into three sections:

- C The first section uses analysis of a set of life stories to describe the world in which Dogomba women's lives take place. This section primarily makes use of qualitative data, educational history sources, and ethnographies.
- C The second section provides evidence of the social impacts of girls' education on the Dogomba women in this extended family. Using primarily quantitative methods, the questions of whether female education leads to reduced fertility, improved child health, and increased child education are analyzed.
- C The third, and major, section tackles the question of how these impacts happen. It is divided into three sub-sections, each addressing a major hypothesis that has been used in the literature on girls' education to explain how education operates to create these social changes. Both quantitative and qualitative data are used to examine each hypothesis.

This study attempts to replicate some of the research that was conducted in India in 1993 (Wolf and Karra, 1994). The same questions are asked, but the contexts for the two studies are different. Not only is there an immense cultural difference between India and Ghana, but the two families who form the basis of the studies are very different. Members of the Indian family are, in most cases, financially secure, most of the men are well-educated, and almost all of the family members live in urban or peri-urban settings. Members of this Ghanaian family are at times financially insecure, the level of education among both men and women is low, and most family members live in small, rural villages.

In order to best understand the many avenues through which education can make changes, it is necessary to look at girls and women in the context of relationships and conditions within which their lives take place. It is also necessary to make as few assumptions as possible about what does and does

not play a role in order to learn new things beyond the conjecture of the researcher. And it is necessary to examine the lives of girls and the women they become over time, a problem when time for longitudinal studies does not exist. The methodology created to allow these approaches is, in addition to the findings of the study, an important part of its contribution.

B. Methodology

In order to explore the relationships within which women use their educations, a single, very extended family was selected as the focus of the study. In order to understand how education has an impact over time, the study is multi-generational. Parents tell about their parents' and siblings' experiences as well as their own, their children talk about their parents' experiences plus how the experiences of their parents had an impact on their lives, and on to their children's children's versions. These reports are combined to create an interlocking account--told by husbands and wives, mothers and fathers, brothers and sisters--of how the educations of women change things.

The study was conducted in Ghana primarily because the use of English simplified the initial stages and made local histories and ethnographies more accessible. The Dagomba area was decided upon because of the low level of education in the Northern Region and the extremely low levels of female education in those districts in which the Dagomba live (see the map, Location of the Dagomba People in Ghana, page 4). The family selected for the research was discovered by finding an educated Dagomba woman and then working backward to her parents, their siblings, and their children.

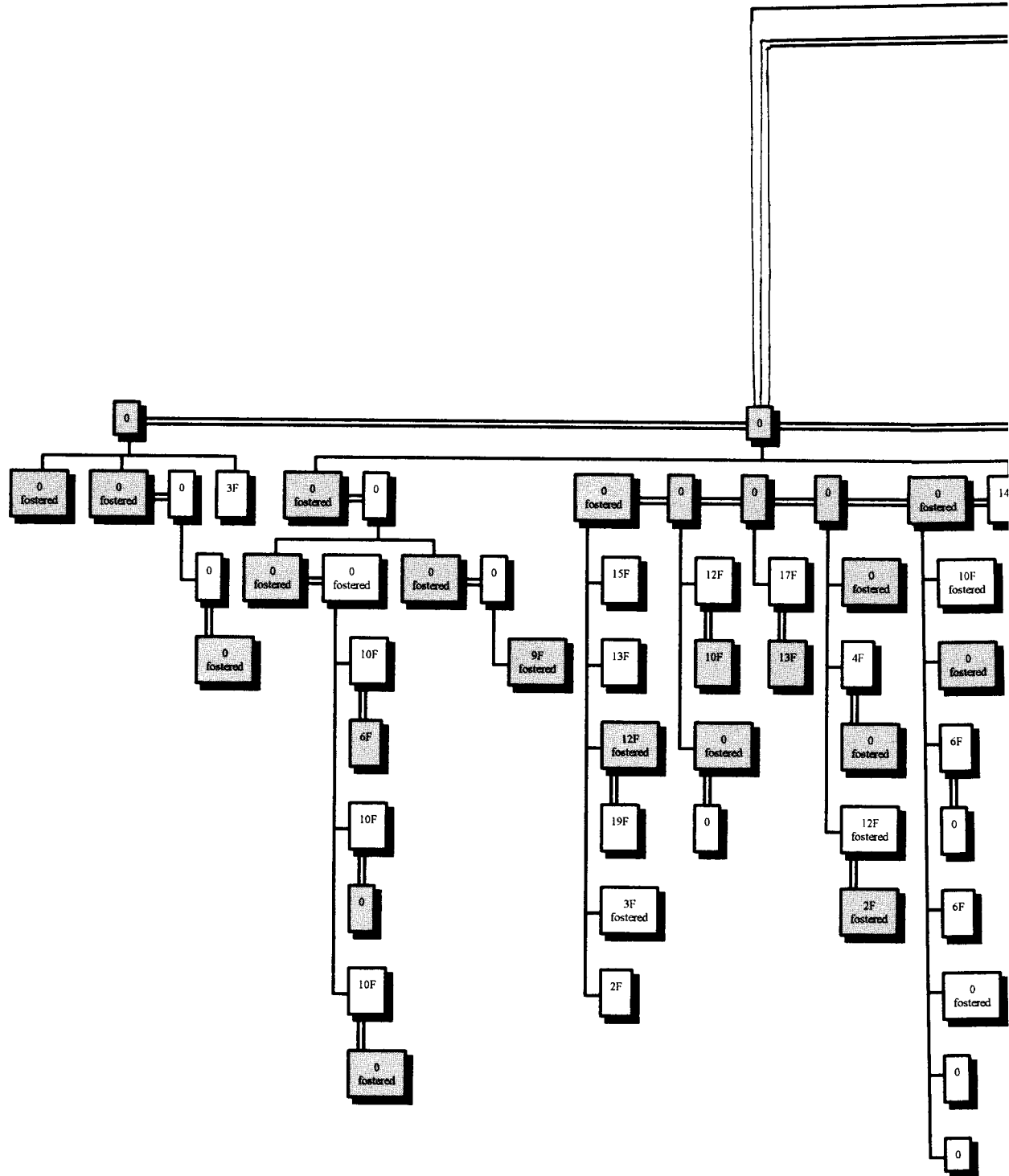
One hundred and fifty adult (married, having had a child, or over 20 years old) individuals were interviewed using a set of unstructured or semi-structured open-ended questions. They were encouraged to give retrospective accounts of their past activities, feelings, and attitudes and to discuss their current situations as well as their expectations for the future. An interview guide was used; it is a variation on one that was developed for similar research in India and it was pilot tested in northern Ghana before the interview process began. Responses were recorded long-hand on the interview guide with identifying information on a cover sheet. The investigator established and maintained rapport with the family and worked directly with a family member as translator over a six-month period. The actual time involved in an interview varied--according to the individual's age, complexity of experience, and openness to discussion--from two to four hours, but, in many cases, relevant information continued to be supplied in an ongoing manner each time the family member was seen. In addition, further interviews were conducted with a number of key family members or family members who had described particularly interesting experiences and/or attitudes. The interview techniques used varied according to the individuals: those who talked freely needed no more than a general question to open a topic or a few specific questions to clarify details; those who were more reserved needed to be asked more specific questions.

With 150 interviews, names that are not always a clear indication of relationship, and the complex nature of Dagomba marriages and kinship structure, some method of picturing how people were related to one another became important. *Family Tree* software was used to enter each individual within his or her set of relationships and construct a diagram of how each person who was interviewed was related to other members who had been interviewed (see the map of Family Relationships Among Interviewees on page 5).

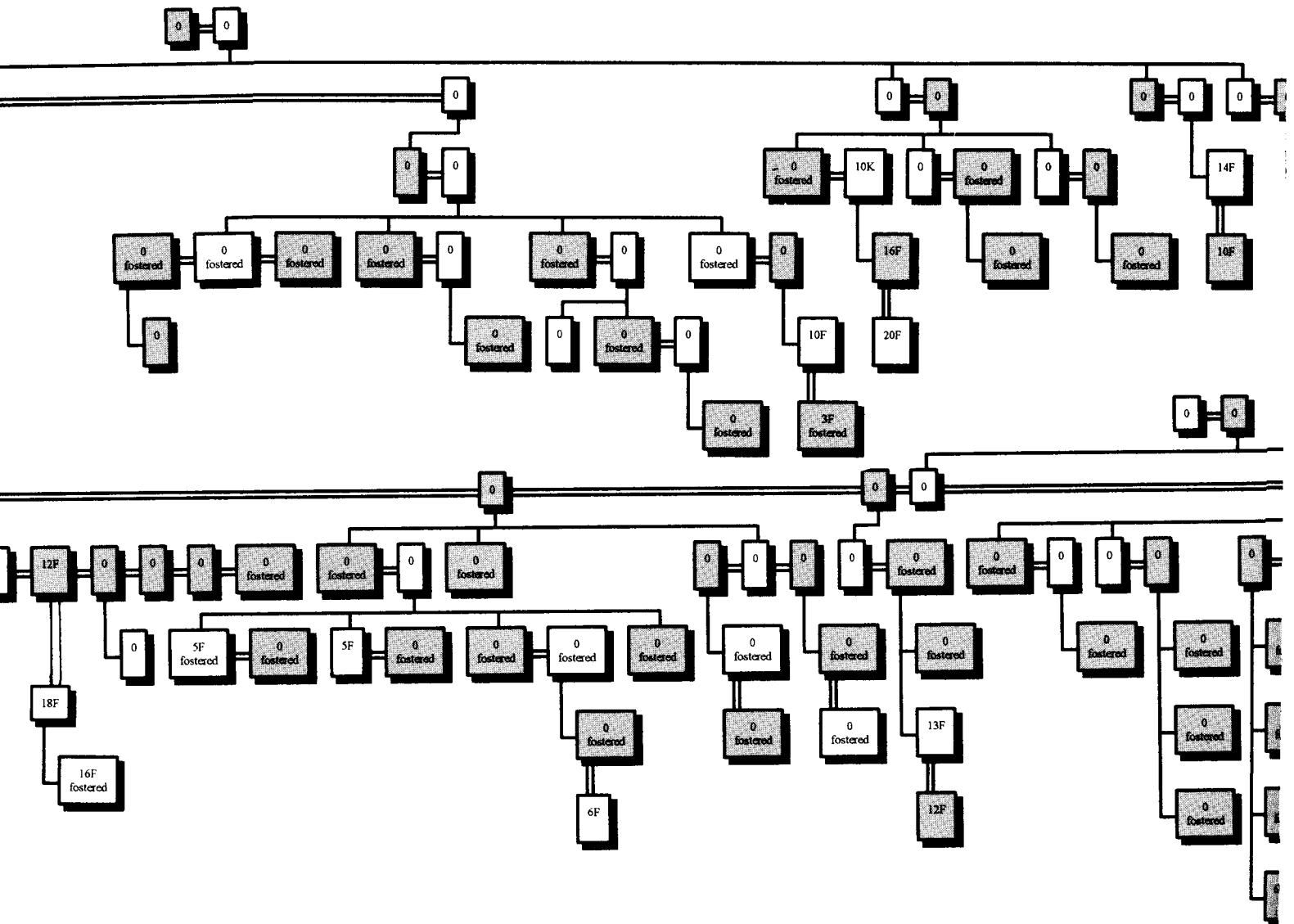
Data coding began with the assignment of an identifying code for each interviewee. Information recorded on the interview guide was coded according to 134 variables. The variables included simple information that was easy to code, such as sex, more complex information that, nevertheless, could be easily coded once standards had been carefully defined, such as number of years of schooling, and complex issues that were difficult to code, such as responses explaining why an individual married or divorced a spouse. The coded material was entered into a *Systat* data base, which made it available for quantitative analysis.

Map 1: Location of the Dagomba People in Ghana





Map 2: Family Relationships At

 Female☐ Male

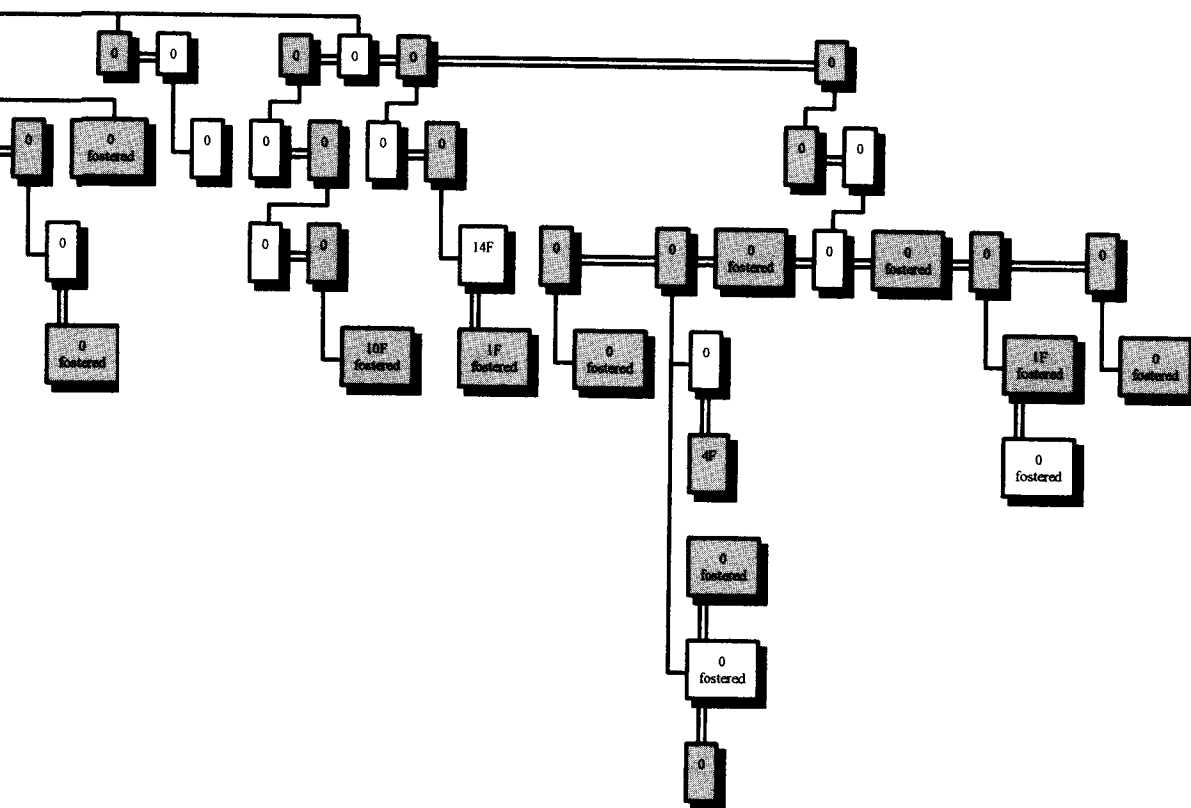
Child of

== Married to

(0 to 19F) = Years of Formal Schooling

Fostered = Term indicates individual was fostered

■
x
—



II. Context

A. The Chief

Until BB¹ was six years old he lived with his father, the chief of their village, his mother, one brother, one sister, nine other wives of his father, 12 sons and 10 daughters of these other wives, five sons of his father's brothers, five sons of his father's sisters, two daughters of his mother's brothers, and over 10 daughters of the relatives of his father's other wives. When he was seven years old, BB was sent to Yendi to live with his father's brother, his four wives, and their children and wards. BB's father received a directive from the colonial British government in 1938, instructing him to send a son to the new school in Yendi, one of only six government primary schools in all of northern Ghana. The British had been trying to get northern chiefs and especially the Dagomba chiefs, to send their sons to school since the first government schools had been established in the north in the early 1900s. The chiefs had at first complied by sending sons of slaves because they were unwilling to "waste" a son by enrolling him in school. The new directive wanted sons who "looked like their fathers." An older half-brother of BB's had been forced to go to the new school, but had misbehaved so badly that he was expelled after three years. BB was then substituted for his half-brother at the school, in part because he already was living in Yendi; the brother who had been expelled was sent to the uncle's household. BB was a good choice because he stayed. He says that conditions at the primary school were "good, although they did whip us. . . food was plentiful. . . we were taught in Dagbani for the first three years and in English for the last three years. . . our teachers were both southerners and northerners. . . the school inspectors were white and they came once a year." BB completed six years of primary school in Yendi, four years of middle school in Tamale, at what was the only middle school in all of northern Ghana at that time, and four years at the teacher training college established in Tamale in 1944 with 16 students. BB went on to become a teacher, a headmaster, and a civil servant, which included acting as information attache to Kenya. When BB was a teacher, he lived in a house provided for teachers with one of his wives and an assortment of school-aged children from all of his wives. When that wife became pregnant, she returned to the village and was replaced by another of his wives; when a child finished school, another replaced him/her. When BB went to Kenya, he took with him one wife and one school-age child of each wife. This system of rotation and substitution, which BB called his "shift" system, was designed to meet the cultural expectations and nuclear family accommodations associated with his role as an educated civil servant in modern Ghana. BB understood early, through the accident of his own schooling, the power of education. He educated most of his sons and daughters and many of the young men who were given to him for training. He showed little preference for educating

¹All names of individuals have been changed while the stories that they have told and their relationships to one another are as recorded during the interview process.

boys over girls. After BB retired and became chief of a small village, he returned to life in a traditional Dagomba compound with his collection of wives, children, wards, and sisters. In 1989, he became chief of a larger village. His new wife, a daughter promised to him from the village where he had previously been chief, was sent to him early in 1997.

The British system of governance in Africa generally rested upon the recruitment and training of indigenous leaders who administered locally for the British. Because British rule in northern Ghana had not been consolidated until 1898, no government schools were built there until 1909 and most missionary schools had been prohibited due to their perceived ties with other governments. By 1925 only five government schools with a total enrollment of 394 boys (Bening, 1978, p.14) served a northern Ghana population of about one million--not enough to provide the English-speaking, educated local administrators required to govern the area. The Chief Commissioner of that period stated that "in the face of the fact that most of the present generation of chiefs and most of their probable successors will be of little use to us in administration or any other capacity whatsoever, it would appear that there is the most pressing need for schools to be started. . .so that a new generation of chiefs may be trained" (Bening, 1978, p.62).

The problem, however, was not only a lack of schools, but also an unwillingness to send children to the schools that did exist. Until 1933 administration of schools in northern Ghana was conducted from Accra. At that time, in order to encourage greater local participation, "native authorities" were established for local management of schools. In 1937, the Yaa Naa, the paramount chief of the Dagomba, at the opening of the new Native Authority School in Yendi, the school that BB attended a few years later, finally gave his support to formal schooling. He said that the Dagomba ". . .have always had their own system of education. . .but realize that they must have boys who can read and write English to act as links between the Central Government and the Local Government" (Bening, 1978, p.87). In an attempt to produce the educated chiefs the British felt they needed, a message was sent to each chief requiring the presence of at least one son at the nearest government school. One can only guess that the British were thinking about chiefs as resembling lords in their own country, each with a few sons who could inherit their position. But most Dagomba chiefs, as in the case of BB's father, had dozens of sons who could be selected among. While the British may have assumed that a senior son would be selected for the honor of schooling, BB was a junior son of a junior wife. Tait (1954), illustrating social change in northern Ghana with the process of secession that occurred at the death of the Yaa Naa of the Dagomba in 1953, pointed out that none of the eligible claimants to his position were literate in English and none had received any education.

According to 1960 census figures, school attendance in the Dagomba area was still strikingly low, even in comparison with neighboring groups in northern Ghana (see Chart 1). The schools built in the Dagomba districts continued to have great difficulty filling their vacant places.

Chart 1: Percent of Ghanaian Boys 6-14 Years Old Enrolled in Primary School in 1960

REGION OF GHANA ETHNIC GROUP	% BOYS ENROLLED
All of Ghana	50
Northern Region Gonja areas	17
Wala areas	31
<i>Dagomba areas</i>	<i>12</i>

Source: 1960 Census of Ghana, Special Report E (in Oppong, 1966, p.18).

A case study of school enrollment in a Dagomba village with a population of about 1,000 from the school's opening in 1956 through 1964, indicates that most students were still recruited under pressure and few parents sent their children to school on a voluntary basis (Oppong, 1966). In 1997, the Dagomba area continues to include school districts with some of the lowest enrollments in all of Ghana and the absolute lowest enrollments of girls (see Chart 2).

Chart 2: Girls' Enrollment as Percent of Total Enrollment in 1994-95

REGION OF GHANA	% GIRLS	DISTRICT	% GIRLS
Greater Accra	47	Accra (high)	51
		Dangme East (low)	45
Upper West	44	Sissala (high)	51
		Wa (low)	42
Upper East	41	Builssa (high)	51
		Bawku (low)	37
Northern	37	West Mamprusi (high)	42
		<i>Gushiegu-Karaga*</i>	<i>23</i>
		<i>Savelugu-Nanton*</i>	<i>30</i>
		<i>Tolon-Kumbungu*</i>	<i>29</i>

* = Districts that are primarily composed of Dagomba occupants

Source: Public Primary School Statistics, 1994-95, Ministry of Education, Government of Ghana.

Traditional Dagomba society was complex in the roles adults were required to fill: chiefs, warriors, drummers, barbers, priests, village elders, butchers, cooks, diviners, fiddlers, blacksmiths, traders, farmers, etc. Training for each of these roles was generally given to and restricted to the decedents of those currently filling those roles: the son of a drummer was trained as a drummer; only sons of chiefs were eligible to become chief. Training required apprenticeship at an early age and a gradual movement through various stages of accomplishment. The fulfillment of this complex network of roles is still seen as essential to the maintenance of Dagomba society.

The British colonists were clear in why they wanted to educate Dagomba boys and who they wanted those boys to be. Today, education specialists feel that all children should be educated and often act as if no system of education exists other than the formal schooling offered by the government. Yet the Dagomba feel that they had and still have a complex and viable system of their own for training children to fulfill their adult roles in their society. The cost of educating a child is considered to be taking him or her away from other roles that continue to be important. BB is an unusual chief because he has had an education; until recently the Dagomba preference has been for a chief without formal education who, it is felt, will be true to Dagomba customs. When the teacher in the local school, built soon after BB became chief in the village, left in the fall of 1996 and was not replaced, the empty schoolhouse was particularly annoying to the villagers who had selected certain children to be educated, which meant not training them to farm or fulfill other traditional roles, and now watched those children doing nothing and receiving no training.

In the interviews conducted in 1996, the most common attitude about educating one's children was that a few should be sent to school to prepare them for the new roles now available in the larger society. This could even mean attempting to have extra children so that they could be educated in addition to having enough children to fill the traditional roles. One man, who placed far more value on education than most members of his culture, asked our advice about his decision to send to school two children from each of his four wives.

Each culture has its own underlying structure of values and relationships that direct its members' lives. The underlying Dagomba social structure, unlike most African cultures, is neither a matrilineal nor patrilineal corporate group defined by descent from a common ancestor. The Dagomba, like a number of other societies found in northern Ghana (Goody, 1982), build their society through a network of horizontal links among families, combining kinship ties through both mothers and fathers, association with particular geographic locations, and political linkages.² It has been a remarkably successful structure: the Dagomba currently are one of the most powerful ethnic groups in Ghana.

² Abu (1992, p.52) states that, "The Dagomba do not have unilineal descent groups as the acephalous peoples of Northern Ghana or matrilineal Akan do. Their family organization is not based on corporate lineage ownership of resources in land, wives, and shrines as is that of patrilineal descent group societies. . .Dagomba rather maintain kinship links through intermarriage. . .and fostering of each other's children. Moreover they give considerable weight to the matrilineal side in kinship reckoning."

BB's story illustrates the patterns generated by this social structure, a network of defined roles through which individuals rotate. The individuals who occupy those roles can be substituted for one another as long as they meet the relevant criteria: male or female; of the lineage associated with that role; of the correct birth position in a family; of the correct wife position in a family; from the relevant village; etc. For example, BB's creative "shift" system for wives and children, which met the nuclear family expectations of his professional life, was built upon traditional patterns of rotation and substitution. Traditionally each wife is expected to cook for two days, the nights of which she is expected to sleep with the household head. Children are "given" to women who have no children. A brother can take a brother's place, as when BB replaced his brother at school and his brother replaced him in his uncle's household, because siblings are often treated as if they are equivalent. A chief rotates through chiefdomships from smaller to more important villages. A sister can be substituted for a girl promised to a man in marriage. If a drummer has no sons, relatives supply a replacement boy to be educated as a drummer.

B. The Chief's Older Sister

Aunt N is probably in her 90s. She spent her first years with her mother and father, four brothers and sisters, 11 other wives of her father, and about 70 other relatives. When she was five years old she was "given" to her father's sister. Aunt N received no education and lived in her foster household until her marriage when she was 17 years old, the second of three wives to the man selected for her. "I could not have dreamed of disobeying my father even if he had wanted to marry me to a goat," she said about her marriage arrangements. On closer questioning, however, she admits that she and another ward had been considering elopement with two young men, a traditional means for girls to select their own husbands. Her father called them to him when he heard about their plans and said that they would be "graves in the courtyard" if they went against the wishes of the dead family member who had promised them in marriage when they were small children.³ The other girl was braver than Aunt N; she ran away with her boyfriend and, soon after, fell ill and died. Aunt N married the person selected for her and bore five children. In spite of the fact that she says, "When you are educated in an illiterate family, you are the only one who can see in a family of blind people," of her four children who survived infancy, none received any education. Nor were any of the four girls who were fostered to her care educated. Aunt N's husband is now dead and she has returned to live in the household into which she was born.

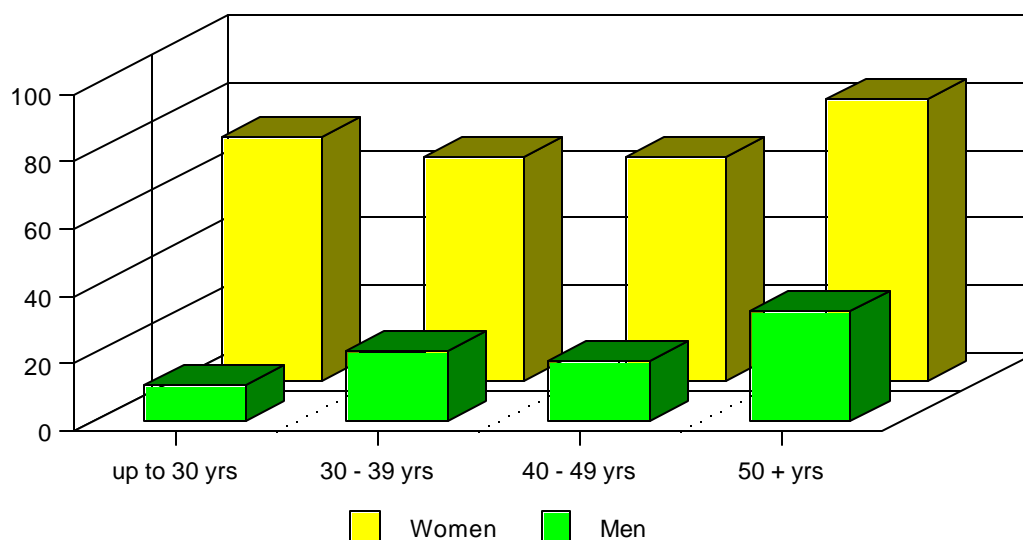
The traditional Dagomba system for creating horizontal kinship links is grounded in the practice of child fostering. Two reasons for fostering children are given: (1) parents will spoil their own children and not be strict in enforcing the training necessary for their future roles in Dogomba society; and (2) there is an

³There is a strong belief in ghosts and the power of dead relatives among the Dagomba.

obligation to maintain ties with the families of both the mother and father. Only girls are given to father's sisters, who make their claim on a child as soon as the pregnancy is announced by caring for the mother-to-be throughout her pregnancy in the hope that it will be a girl. Traditionally it is a boy who is given to the mother's family, which creates a symmetry in which girls go to the father's sisters and boys go to the mother's brothers. Once a woman is beyond her childbearing years, it is customary for her to return to her family and, if a son of hers had been fostered to her family, he will now be grown and able to provide a home for her. The claims of the mother's family for a "replacement" for the loss of the mother are often backed with powerful supernatural and political sanctions (Oppong and Abu, 1987) and if a son is not available, then a daughter can be sent. Sons can also sometimes be given to their father's brothers for training, especially chief's sons as in BB's case. Chief's sons are generally "...sent into the households of other chiefs to be reared. As they grow up they gain experience in many chiefdoms and along many different lines; but they are prevented from attending the government schools...the higher the father is in the hierarchy, the less likely are his sons to be given a modern education" (Tait, 1954, p.4).

In 1971, Oppong found that 35 percent of the men and 17 percent of the women in the sample of Dagomba households where she worked had been fostered (Oppong, 1973, p.45). Among the Dagomba family members who were interviewed in 1996, only 23 percent of the males had been fostered when they were boys, while 74 percent of the women had been fostered as girls. When male and female family members are divided into age categories, the percent of men who had been fostered increases with their age, while the percent of women who had been fostered remains relatively constant, although a higher percent of women in the oldest category had been fostered (see Chart 3).

Chart 3: Percent of Fostered Women and Men According to Age Category



Both Aunt N and BB agree that some changes in fostering practice have been taking place over the last 25 years that could have created this shift. Girls are generally “given” to the father’s family, father’s sisters claiming the child before she is born. Although it is customary to give a boy to the mother’s family, girls can be substituted. Parents may be becoming less willing to “give” away their male children for a number of reasons. Many of the traditional professions that their son would have been sent to be trained in have now declined in significance and generally will not provide sufficient support as an adult. Even more important, declining land productivity (Abu, 1992) has made the number of male farmers one can recruit increasingly valuable as increased labor is used to maintain crop yields. Fewer boys are, consequently, being sent to the fathers’ brothers for training. Although it is traditional to give a male child to the mother’s family, 33 percent of the interviewed women who had been fostered when they were children had been given to their mother’s family. As the number of boys who are being fostered declines, the number of girls who are fostered is not decreasing and may, as Oppong’s data suggest, be increasing in order to maintain traditional obligations to both the father’s and mother’s relatives.

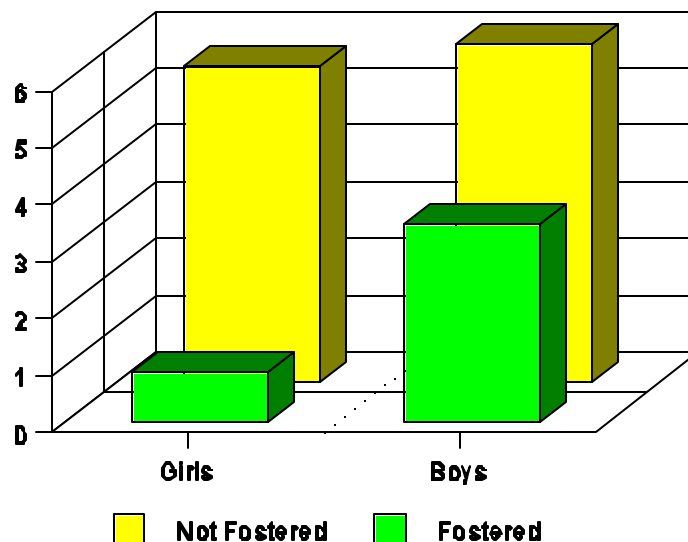
Fostering has consequences in terms of whether or not a child will receive education. When discussing variations in the amount of education that their children have received, many of the men and the women who were interviewed said that the major reason for differences was that they could not control the amount of education that a child of theirs who had been fostered would receive. A foster child is truly “given” and the person who receives the child, always a male relative in the case of a boy and a female relative in the case of a girl, is responsible for that child’s education. When family members were asked why some of their children received more education than others, the most frequent answer involved fostering: “Because some of my children are staying with other people and I can’t tell them what to do with them. They have to decide whether or not to educate the children;” “When you give birth to girls, you don’t own them and you can’t tell their aunts what to do with them;” “Those who stayed with me are educated. Those I gave to relatives are not educated;” and “The girl was given to me to help me in the house, not to go to school. Even if I wanted to send her, I can’t afford it and if I ask her father for the money, he will tell me that she is my responsibility.”

A foster father can afford to educate his male wards and often does; the interviewed men who had been fostered had a mean of 3.50 years of schooling while those who had not been fostered had a mean of 5.95 years. Foster mothers, however, can rarely afford to educate their female wards. There is a Dagomba taboo on women using a hoe and, as the word for “hoe” is synonymous with the word for “farm” in Dabani, women are excluded from most farming activities, which limits their access to cash crops. Women have small gardens, which the men plow for them, to grow the vegetables and herbs needed for their cooking responsibilities; they also receive one fourth of the groundnuts produced in exchange for doing the harvesting. While these minor farming activities, together with the trading activities that they undertake on behalf of men, provide enough income to cover their personal expenses, they do not furnish enough cash for school fees, uniforms, desks, books, etc. It is the responsibility of their children’s father to finance the children’s educations, but a woman’s foster daughters are her own responsibility. Even if a woman believes in the power of education, as in Aunt N’s case, unless she has her own cash-paying job, she is unable to send her wards to school. Most women, consequently,

regard the girls that are fostered to them as there to provide help for them with their household tasks and do not consider educating them.

Eighty-seven percent of the women who were interviewed and 86 percent of the men said that education was equally useful for boys and girls. There is good evidence that they are not only saying this, but also select boys and/or girls for school in an almost equal manner. The mean amount of education among interviewed women who were not given as foster children in their childhood is 5.56 years, almost equal to the amount received by boys who were not fostered. Both boys and girls received less education if they had been fostered, but the mean amount of education for girls who had been fostered is less than one year (see Chart 4). Much of the strikingly low enrollment rates for girls in Dagomba districts may be due to the practice of fostering, a practice that had been experienced by 74 percent of the women who were interviewed and may be increasing among the current generation of girls.

Chart 4: Mean Years of Education for Fostered and Not Fostered Children



C. The Fostered Daughter

BB understood the value of education and also understood that he would not be able to educate any children who were sent as wards to other households. Consequently, he attempted to avoid giving his children to uneducated foster parents. One of his daughters was made the ward of another of his wives, a wife who had an education (see next story); the fostering of two other daughters was postponed by taking them with him to Kenya where their educations continued. However, his obligations to relatives remained, and some of his children did become wards of uneducated foster parents. One son was sent to the boy's mother's family where he received no education, one of the daughters taken to Kenya was claimed by her aunt when she returned and

her schooling stopped at that point, and two of his daughters were given in their early childhood to his sisters and received no education. One of those daughters, Mata, is an exceptionally pretty woman who was almost “captured” as wife to another chief. The custom is that if a girl appears carrying a message to a chief, as Mata had, and the chief likes her looks, he can “close the doors” and keep her as his wife. The chief closed the doors on Mata, but another message was quickly sent to him that he had captured the daughter of a rival chief, a matter of very poor politics, and Mata was released. Mata selected her own husband, becoming his third wife. As an attractive daughter of a chief, she probably could have chosen to marry a man as his first wife, which provides more status, but felt that being a third wife had worked well for her mother, who came to be BB’s first wife after other wives had died or left the household, and this man had already proven himself to be kind and secure. Mata’s plan is to secure enough capital to set herself up in trading activities, a career that would make up for the career an education might have made possible. Mata is working at building up trading possibilities while she waits in her parent’s household for her son to become old enough for their return to her husband’s household. Dagomba women generally go back to their parent’s household for approximately three years after the birth of each of their first two children. When Mata returns to her husband’s home, because this is her second child, her husband will have to provide her with her own separate living unit within the larger complex of the household. Her first child, a daughter, was fostered to a sister of her husband’s immediately after her son was born, when it is said that the mother will “miss her less.” But Mata says that she does miss her daughter and will never allow another of her children to be fostered.

A Dagomba marriage, as these stories have illustrated, can be created in a number of ways. Relatives, primarily fathers, can promise a girl child to a friend or person of importance, which creates a kinship link between their families, such as the new young wife who had just arrived for BB from the village where he had previously been chief. Men can petition a young girl’s family for her as a bride, often bringing small amounts of food as gifts over a period of years until she reaches marriage age. The Dagomba talk of couples falling in love just as Americans and Europeans do, and, although they do not see it as a state that will persist over time, love is often given as a reason for marriage. A third of the women in this family said that having met their spouses and wanting to marry them was the reason for their first marriage; a third of the men gave the same reason for their first marriages. Young women can be “captured,” as Mata almost was, or couples can elope as a means for getting around family objections, as Aunt N had considered doing. Virginity is valued and, once couples have had a sexual relationship, parents are likely to support the marriage. Eloping with a man and hoping that her family will accept him as her husband is one means by which a young woman can select her own husband.

The formal establishment of a marriage by ritual and brideprice often occurs after the event. In many African cultures, brideprices can be so steep that a man will spend much of his life paying for his bride, a factor that supports the permanent establishment of the marriage and the redefinition of the women as a member of the man’s lineage group. The Dagomba, with little emphasis placed upon lineage group membership, ask extremely small brideprices--some cola nuts and a chicken for example--and marriages

are not very durable. Twenty-six percent of the women interviewed had had more than one marriage; 51 percent of the men had had more than one marriage. Divorce is frequent and, while men often have multiple simultaneous marriages, women have multiple serial marriages.

In spite of the great importance Dagomba place on having children, traditional patterns are very successful in controlling fertility. The mean number of children for the women who were interviewed is 4.19 children, relatively few compared to most African societies. Traditional cultural practice requires a wife to leave her husband's household after the birth of a child for approximately three years, or until the child is weaned and walking. It is considered important for both mother's and child's health that another pregnancy should not occur before this time has elapsed. The wife then returns to her husband's household until she becomes pregnant again and has a second child, at which point she again goes to her parent's household until the second child is about three years old. When she returns to her husband this time, he is expected to have built or allocated a living unit for her and she will not leave the household after subsequent births.

During the periods away from her husband's household, a woman often spends her time in trading activities, one goal of which is to secure the pots and pans necessary for full wife status. When a woman returns with her second child to a house of her own, she is expected to have accumulated an extensive set of pots and pans that she will use to feed the entire household upon her return. As with other Dagomba social roles, such as chief, farmer, or priest, a wife is required to serve a period of apprenticeship during which she receives the education necessary for her role. A wife also rotates through a number of positions over time, and the achievement of full wife status with pots, pans, and her own living unit does not complete the process. Her position in her household and in the large community is constantly readjusted as other wives die, leave, or are divorced, new wives are added, new babies are born, or she reaches the end of her childbearing years.

D. The Educated Wife

Florence's mother eloped with her father against her parents' wishes. Her parents were opposed to the marriage because they were Muslim and Florence's father was of the chief's lineage. A chief is required to be true to traditional Dagomba beliefs, which precludes membership in any other religious group, such as Christianity or Islam. Florence's mother became pregnant and gave birth to her daughter before she was taken back by her parents. According to Dagomba tradition, the child, Florence, remained with her father. As an only child without a mother, Florence was in a precarious situation as none of her father's other wives could be expected to be kind to her. Florence's father had taken a job working on the grounds of the new government boarding school for girls that had just been built in Yendi; there he had seen for himself that the children were not mistreated, one of the fears the Dagomba parents had about sending their

children to school. He enrolled Florence in the school,⁴ telling her that “Education will be your brothers and sisters.” Florence completed primary and middle school; she dropped out due to pregnancy after she had begun teacher training. Her father was opposed to her marrying the father of the child because he was not a Dagomba, but she, like her mother, eloped. She lived with her husband for four years in spite of her fathers’ objections, but eventually his opposition led to Florence dissolving the marriage. She had two children, a daughter who died of measles when she was two years old and a son who is now a teacher. Her second marriage, to BB as his sixth wife, was approved of by her father, but she was never able to have any more children. Without children, Florence returned to school for more education: a two-year Community Health Nursing course and a two-year training in midwifery. Because she could not have any more children, she was given many foster daughters, including the daughter of one of BB’s other wives. Of her seven foster daughters, all but one have received some schooling and three have relatively advanced educations. Within the dynamics of household politics, Florence has fared well in BB’s household although she has failed to fulfill the fundamental role of a woman in Dagomba society, which is to have children. Due to the death or divorce of other wives, Florence is now BB’s third wife. The first wife has first wife status; the second wife has six sons, a demographic miracle for which all Dagomba women hope. Florence has had, as her father promised, her education to take care of her. She was the wife chosen to go to Kenya because of her education. She is able to educate her wards because she has a salary, a source of cash income no other woman in the household has. She works in the Health Station several miles away on the paved road, a trip she generally walks even in the rainy season when the stream she must cross can be neck deep. In addition, she has opened a clinic in the village where she keeps the first birth records that the village has ever had.

Due to her father’s association with the school in Yendi, Florence was one of the very first girls in northern Ghana to be educated. Of her nine half-sisters who were fostered, none received any education; of the three girls, including herself, not fostered, two received what was at that time an extraordinary amount of formal education. It was only in 1936, after the administration of schools had been transferred to local “native authorities,” that girls’ education began to be seen as important. At that point, all government schools began offering “free education to all girls whose parents agreed that, if required, they will accept employment under the native administration at the close of their education” (Bening, 1978, p.95). Nevertheless, during the years when Florence was in primary school, she was one of only about 30 girls in all of the formal schools in northern Ghana, and the middle school for girls that she attended in Tamale was only established four years before she arrived (Bening, 1978).

Florence is also unusual in that she educated the daughters of her relatives who were sent to her to be her wards. According to worldwide correlations about the impact of educating girls, a mother’s education is related to the education that her children, and especially her daughters, will receive. This is

⁴Oppong (1966, p. 21) states that, due to the deep-seated prejudice against schools, the Dagomba children sent to the early schools were frequently the “. . .motherless or fatherless. . .”

true among the Dagomba family members who were interviewed: the amount of education that a mother has is significantly correlated with the percentage of her daughters who have been sent to school.⁵ However, among these women, an even stronger relationship exists between the education of a foster mother and the likelihood that she will educate her foster daughter.⁶ Although 86 percent of the men interviewed said that it is their responsibility to decide if a child will go to school and pay for their education, and 65 percent of their wives agreed with them, both the mother's and the father's education have a real impact on the percentage of sons, daughters, and wards who are sent to school. A more complete discussion of the relationships among parents', foster parents', and children's educations is found in Chapter III.

Of any of the social impacts of girls' education, it is the potential for changes in health practices that may be the most important for the Dagomba. Although the amount of education that the women of this family have is significantly related to the number of children that they have had⁷, their traditional practice of long absence from the husband's household after each of the first two pregnancies has led to a relatively low fertility rate, the women who were interviewed having only an average of 4.19 children each. An analysis of the relationship between education and fertility is also located in Chapter III. The Dagomba are not interested in educating any more of their children than they currently do because of the poor quality of the schooling that is generally offered, the lack of job opportunities in the area for those who are educated, and the insistent need for farm labor. But the issue of child health is one that concerns every Dagomba family. Approximately 20 percent of the children of the family members who were interviewed had died by the time they were five years old. And the number of children who die before they are five years old is significantly related to the amount of education that their mothers have had.⁸ The relationships among education, child mortality, and child health are explored in Chapter III.

Florence's education had an impact not only on her own life, but also on the communities within which she has lived. Florence influenced the health of the family members and villagers around her and their children through both her role as friend or relative and her role as public health nurse. When those interviewed were asked where they got their medical information, both men and women indicated family or friends or a medical person or facility as the most important sources for what they knew about specific medical treatments. Almost 30 percent of the family members who were interviewed in towns and villages all over the Northern Region explicitly stated that they had learned what they knew about contraception and/or health from Florence. The impact of a single educated woman can be immense.

⁵ $r = +.52$, $\text{prob} < .01$

⁶ $r = +.59$, $\text{prob} < .01$

⁷ $r = -.27$, $\text{prob} < .01$

⁸ $r = -.22$, $\text{prob} < .05$

E. An Educated Woman

It is not clear whether Fati was fostered to or simply gradually became the ward of one of her father's other wives. Whatever the processes, it is clear that Fati aligned herself at an early age with her mother's "rival."⁹ Fati's foster mother had been previously married, had produced no children in that marriage, had divorced and remarried, and had again produced no children with Fati's father. She was a baker and had amassed a relatively large fortune; she owned several houses in addition to her own business. Fati was educated by her foster mother: she completed primary school, secondary school, and was in teacher training college before serious problems emerged. A friend of her father's wanted to cement their friendship by becoming relatives; he asked for a daughter by Fati's mother, whom he admired, as wife for his son. Fati's father agreed to this marriage in spite of the fact that the son of his friend had no education. Fati was called back from teacher training college and told of her father's agreement. No substitution of a sister was possible as Fati was her mother's only daughter. She ran away back to the college and asked for support from the principal, a woman. The principal went to Fati's family, begging them to acknowledge her accomplishments by allowing her to continue her education, but to no avail. Fati went to the man she was to marry and explained to him that he did not want to marry her because she was so strongly opposed to the marriage. Nothing worked, as there are considered to be few rebuffs in Dagomba culture as serious as refusing to fulfill a marriage promise. Fati's mother was fearful that Fati's father would divorce her over the outrageous behavior of her daughter. Finally Fati simply refused to be married to her father's friend's son and was disowned by her family. She returned to teacher training college, paying her way by sewing for people over the school breaks. After completing teacher training, Fati married a well-educated teacher from a wealthy urban Dagomba family, and, after the first child was born, her family relented and acknowledged her, her marriage, and her child. Fati has just had her third child, a son after two daughters. When asked how many children she wanted to have, Fati said two; when asked how many her husband wanted to have, Fati said, "I wish I had asked him that before we got married." Her husband, although well-educated and supportive of Fati, is a devout Muslim and believes that he should have as many children as possible. In addition, he is now encountering ridicule from his family, friends, and neighbors because he has only one wife and so few children. Fati says that she will compromise and have one more child, but that is all. If, after that, her husband still feels that he must have more children, he will have to take another wife. Fati feels that Dagomba women waste their lives in petty rivalries among wives in the same household and is unwilling to do so herself. Depending on who her husband takes as a second wife, if he does, she will decide whether to stay or leave. If she leaves, the children will stay with her husband.

⁹ The Dagbani word is used to describe other wives of one's husband is always translated as "rival" and appears to carry a similar meaning to "rival" in English.

Fati's strength of character and insight into her own situation may owe a great deal to several strong women in her life as well as to her education. Her foster mother clearly played a major role in shaping her life, and her principal at the teacher training college, a woman well known in educational circles in Ghana, provided yet another role model at a key moment in her life. The fact that Fati's foster mother had no children of her own may be significant: Mata, another woman of strong character, was the foster daughter of a woman who could not herself have children, and Florence had no children of her own during the years when she raised her foster daughters. The special role of women without children appeared throughout the interviews, perhaps because they must achieve their status and satisfaction through means other than those of most Dagomba women.

The dilemma of creating social change is not solved by just producing an educated woman, or even an educated woman and an educated man; it requires changing cultural expectations to match the new patterns created by education. Fati's difficulties about her marriage can only be expected to become more common as more women receive an education and assume, as part of their changed role, that they will choose their own husbands. Among the Dagomba, some women have always selected their own husbands directly or through the practice of elopement, which may help to pave the way for this change. The irony of Fati's story is that her husband is a man who is sympathetic to changes in female roles and is extraordinarily supportive of his wife in many ways. Nevertheless, the expectation is that he will have multiple wives and many children. He is not unusual in that 80 percent of the women who were interviewed and 84 percent of the men wanted to have more than four children.

The story of Fati's life has not been blissful in spite of her many advantages. While the education of girls is being promoted in terms of the overall good of the society--lower fertility, lower child mortality, better child health, and more educated children--little attention is being focused on the women themselves who have to be the agents for that change. Just as in traditional Dagomba society it is the women who, as wards or wives, are used to cement the social network of the society together, we are expecting educated women to create a new social reality whatever the personal cost.

III. The Impact of Girls' Education

A. Fertility

Due to the social and political sensitivity of family or population planning activities, each country tends to carefully select the language that will be used to describe the services that are offered. Before conducting interviews, we investigated what words were used in Ghana to discuss family planning and found that the term that is most frequently used is “child spacing.” However, using these words during the interview process, it was not uncommon to find the following sequence of questions and answers:

“Have you ever heard of ‘child spacing?’”	“Yes.”
“What do you think about it?”	“Great idea. Excellent.”
“How many children do you want to have?”	“About 10.”

The Dagomba find nothing new in the notion of “child spacing” as they feel that is what they have always practiced. Women generally leave their husband’s household soon after the birth of their first child and do not return until the child is weaned and walking well, usually around three years old. It is believed that a new pregnancy should not occur before this time for the health of both mother and child. Among the women in this family who were interviewed, the mean number of years away from their husbands after the birth of their child (3.03 years) was almost exactly the three years that they said was the ideal (see Chart 5).¹ Women with some education tended to stay away slightly less time than women with no education; both women with and without education stayed away less time after the birth of their second child.

Chart 5: Mean Number of Years Away from Husband After Birth of Child

	NO EDUCATION	N	SOME EDUCATION	N
FIRST CHILD	3.31 yrs	67	2.25 yrs	24
SECOND CHILD	2.56 yrs	50	1.19 yrs	16

Women generally do not leave their husband’s household after the birth of their third child and subsequent births, but the impact of the two extended periods of separation is heightened because it occurs during a woman’s most fertile years. Among the women who were interviewed, the average age

¹ Studies among other ethnic groups in Ghana have shown that actual abstinence after childbirth is often less than is described as normal (Bleek, 1976), but this does not appear to be the case among members of this Dogomba family.

for their first marriage was 19.36 years.² If a new wife became pregnant within the first year of her marriage, gave birth to her first child, went away for three years, became pregnant within the first year of her return, gave birth to a second child, and left for another three years, she would be, at the very least, 27 years old when she finally came to reside permanently in her husband's household. In addition, during the later years of her marriage, her husband is likely to have newer and younger wives who have become his sexual favorites. Given these practices, it is not surprising that the mean number of children among the women who were interviewed is only 4.19 children.³ Variations in cultural practices involving abstinence after child birth have been used to explain differences in fertility among ethnic groups in Ghana, and the Dogomba have been classified as a group with a relatively low fertility rate (Gaisie, 1984).

It is, therefore, not hard to understand why a Dagomba man or woman might find the notion of "child spacing" to be an "excellent" idea, yet still plan on having ten children, more than would be considered ideal in any family planning program. While there is a solid understanding of why children should be spaced whatever the educational background of the individual, the concept of limiting the overall number of children often appears to be missing. Eighty-nine percent of the women and 80 percent of the men said that child spacing was a good idea, but it was only those with some education who tended to see "spacing" children as related to having fewer children. Almost all of the family members who offered a reason for limiting the number of children they wanted, such as saying that that was as many children as they could educate or as many as they could provide for, were those who had received some education. Those who had no education tended to name the roles for which they needed many children, as requiring children for farming, or farming and fulfilling responsibilities to relatives, or farming, fulfilling responsibilities to relatives, and sending some to school.

Whether or not an individual had attended school was not only related to the type of explanation given for why he or she desired a specific number of children, but was also related to the number of children that were desired. The number of children that both men and women say that they want to have is significantly related to the amount of education that they have received.⁴ A clearer picture of the relationship between education and the number of children that are desired can be drawn by contrasting those who have received some schooling with those who have never received any education (see Chart 6).

² Very few of the people who were interviewed knew their exact age and, in many cases, the interviewer had to approximate how old she believed the family member to be based on his or her family position, appearance, age of children, events recalled, etc. Consequently, all ages used in this report must be treated with extreme caution. Nevertheless, this average age is close to the age reported by most of the women in the sample who were able to say how old they were when they married with some confidence.

³ This figure is lower than the mean number that they will eventually have, as many of these women had not completed their childbearing years.

⁴ For women: $r = -.34$, $\text{prob} < .01$; for men: $r = -.48$, $\text{prob} < .01$

Chart 6: Average Number of Children Desired

	NO EDUCATION	N	SOME EDUCATION	N
WOMEN	8.73 children	5 2	5.50 children	20
MEN	13.45 children	1 1	8.65 children	20

The number of family members who said how many children that they would like to have is fewer than the total number who were interviewed because many, especially those who had received no education, responded that they had “no idea” how many children they wanted. In addition, some, especially men, said that they wanted “as many children as possible,” and a few women who were unable to have children were not asked.

Social and cultural pressures exist among Dagomba families, as throughout Ghana and in other West African societies, for childbearing to continue throughout both a man’s and a woman’s potential reproductive span. This pressure, combined with the longer intervals between births due to abstinence, has led to a different pattern of fertility for Dagomba women than most Ghanaian women. While overall fertility rates for Ghana peak for women between 25 and 29 years old, women in northern Ghana maintain a lower level of fertility consistently from 20 to 34 years of age and their fertility drops off less sharply after the age of 35 than for Ghanaian women in general (Singh, Owusu, and Shah, 1985).

Chart 7: Average Number of Child Births According to Age Category

AGE (IN YEARS)	MEN	N	WOMEN	N
UP TO 30	1.11	9	1.76	37
30 - 39	3.93	14	4.17	24
40 - 49	6.55	11	7.08	12
50 or MORE	14.83	18	6.16	25

When family members who were interviewed are divided into age groups, the increases with age in the mean number of children that they have had demonstrates this level fertility rate and how late into life childbearing continues. The number of children women have had appears to level off around the age of 50 years, the end of their childbearing years, suggesting that the younger women simply have not yet had time to produce that many children. The men, on the other hand, often continue to father more children after they are 70 years old. The larger number of children that older women and men have given birth to

could also indicate a shift in fertility that has been reported for Ghana in general,⁵ which will result in younger members of the society having fewer children by the time that they reach the end of their reproductive years. Chart 7 also demonstrates, through the sharp difference in the number of children women over 40 years old have given birth to compared to women under 40 years old, the point in time when the use of modern methods of contraception began to be more common in this area. Of the 25 percent of the women who were interviewed who had used a modern contraceptive technique, all but three of them were under 40 years old. Among the men, 36 percent had tried a contraceptive technique, but only 71 percent of those were under 40 years old.

Chart 8: Average Number of Children Desired According to Age Category

AGE (IN YEARS)	MEN	N	WOMEN	N
UP TO 30	5.75	8	5.58	33
30 - 39	6.64	11	8.35	20
40 - 49	17.57	7	9.00	7
50 or MORE	15.80	5	12.50	12

Because men and women had not necessarily completed their childbearing years when they were interviewed, it is important to look at the number of children which family members in each of these age categories said that they wanted to have.⁶ A comparison between these two charts indicates two findings: (1) both men and women generally say that they want more children than they actually have; and (2) older family members say that they want/wanted to have more children than do younger family members. The number of children both men and women said that they desired are correlated with the number of children that they have had.⁷

If younger family members say that they want to have fewer children than did their parents and older siblings, then part of the reason may be that younger members of the family are better educated; age and amount of education are significantly negatively correlated for men and women.⁸ Both the number of

⁵ "The average number of children a woman (in Ghana) has during her reproductive years has decreased from 6.4 in 1988 to 5.5 in 1993" (USAID, 1996, p. 24).

⁶ What is meant by wanting to "have" a child is to become the biological parent of a child, not to gain a foster child.

⁷ For women: $r = +.34$, $\text{prob} < .01$; for men: $r = +.69$, $\text{prob} < .01$

⁸ For women: $r = -.28$, $\text{prob} < .01$; for men: $r = -.49$, $\text{prob} < .01$

children that men and women say that they would like to have and the actual number that they have had⁹ are significantly correlated with the amount of education that they have received.

These relationships can clearly be seen when the mean number of children that women and men would like to have and have actually given birth to are compared according to the amount of education that they have received (see Chart 9). As mentioned previously, most of the men and women who said that they either “did not know” how many children they wanted or wanted “as many as possible” are those with no education, which probably makes the mean number of children desired a conservative figure.

Chart 9: Mean Number of Children Born and Mean Number of Children Desired According to Education

	NO ED	N	SOME PRIMARY ED	N	MORE THAN SIX YRS ED	N
# CHILDREN WOMEN DESIRE	8.73	52	6.70	10	4.30	10
# BIRTHS WOMEN HAVE	4.62	72	2.54	13	2.62	13
# CHILDREN MEN DESIRE	13.45	11	16.86	7	4.23	13
# BIRTHS MEN HAVE	11.23	26	6.12	8	3.50	18

Although it is clear that education has an impact on the number of children born and the number of children desired for both men and women, the amount of education necessary before these changes occurs appears to be different for men and women. In this family, any amount of education sharply reduces both the number of children that a woman wants to have and the number that she gives birth to, while it requires more than a primary school education before similar changes occur for men. Some of the possible reasons for this difference will be explored later in Chapter IV as part of the discussion of *how* a woman’s education is able to influence the number of children to whom she gives birth.

B. Child Health

Measuring child health is difficult except in the extreme, which is the number of children that die. In Ghana, under five mortality rates range from 90 per 1000 live births in urban areas to 149 per 1000 live births in rural areas. Child mortality is highest in the Northern Region where the mortality rate is 237

⁹ For women: $r = -.28$, $\text{prob} < .05$; for men: $r = -.49$, $\text{prob} < .01$

deaths per 1000 live births (USAID, 1996, p. 24). The mean number of children in this Dagomba family who had died by the time they were five years old and child mortality rates by the age of five have been calculated according to the sex and amount of education of their parents (see Chart 10).

Chart 10: Mean Number of Children Who Have Died by Five Years and Child Mortality Rate According to Parents' Education

	NO EDUCATION	N	SOME PRIMARY ED	N	MORE THAN SIX YRS ED	N
WOMEN--MEAN # OF CHILD DEATHS	1.32	69	.50	12	.42	12
WOMEN--CHILD MORTALITY RATE	286 per 1000 births		197 per 1000 births		160 per 1000 births	
MEN--MEAN # OF CHILD DEATHS	2.92	25	1.12	8	.67	15
MEN--CHILD MORTALITY RATE	260 per 1000 births		183 per 1000 births		191 per 1000 births	

The mortality rates for all members of this Dagomba family are alarmingly high, especially when compared to the overall *rural* child mortality rate for Ghana, 149 per 1000 births. The average rate for all of the women who were interviewed, irrespective of their education, is 258 deaths by the age of five per 1000 births, higher even than the already high rate of 237 per 1000 births for the Northern Region as a whole. Women's education clearly has an impact on child mortality, but even those women with more than a primary education are losing 16 percent of their children by five years of age. Most of the women who were interviewed had received no education and these women are losing 29 percent of their children before they reach five years of age. The impact of women's education on child mortality appears to be greater than the impact of men's, but the reporting of child deaths by men may not be as reliable as that by women. It is possible that the men, who often do not live in the same household as their young children, are less able to recall correctly the number of child deaths, especially when they have had many children with many different wives.

It is impossible to look at these figures and not wonder what is making them so high. Malnutrition does not appear to be a major factor. The strategy of Dagomba farmers is to produce all food staples that the household consumes and devote surplus land and energy to cash crops. In a village near this family's

general location, half of the farmers surveyed produced a surplus of cassava, maize, yams, and other food staples and only a moderate amount of staples were purchased (Abu, 1992). A few farmers had been forced to sell livestock to purchase staples, but no family appeared to be doing without. The children in the villages where the interviews took place appeared to be adequately nourished. Nor did the children appear to be neglected; because Dagomba women do not farm, they are generally in the household and with their children. In addition, the three years of child spacing between pregnancies protects the health of the child.

Disease appears to be the primary cause for the death of children in this family. Hygiene is poor in towns as well as villages, which means that contagious diseases spread easily and opportunities for infection are plentiful. Preventive medications or treatments for a disease are generally only available in clinics that are often many hours away and transportation is generally not available. Parents frequently use only traditional methods for curing their children or depend upon “drug peddlers” for medication. “Drug peddlers,” or “quack doctors” as they are also known, travel through remote villages selling modern medications. Because they have no training, little understanding of either the uses or dangers associated with medications, and promote drug sales for their profit without regard for the well-being of their customers, the government has made such drug sales illegal. However, it is impossible to police the rural areas in which the “drug peddlers” work, and the demand for their products remains high in spite of the dangers, as they are often the only accessible source for medicine. USAID states that the high rates of child mortality in Ghana can be largely attributed to poor access to health care (1996, p. 24). The differences between urban and rural areas in Ghana as a whole and the particularly high rates in the Northern Region support this conclusion. Among the members of this family, a slightly higher percent of children appear to die when their parents live in relatively more rural areas, but there is no significant correlation between where parents live and the number of child deaths they have experienced. However, very few of those who were interviewed live in what could be considered an urban area.

There is some evidence that health conditions for children may be improving in the Dagomba area of the Northern Region as they have in the rest of Ghana. If child mortality rates are calculated according to mothers’ ages, there is a systematic decrease from older to younger mothers.

Chart 11: Child Mortality Rate by Five Years According to Mother’s Age Category

AGE (IN YEARS)	CHILD MORTALITY RATE PER 1,000 BIRTHS	N
UP TO 30	136	33
30 - 39	221	24
40 -49	236	12
50 or MORE	352	24

However, if the mother's education is also considered, then a large amount of the decrease in child mortality over time appears to be due to an increase in the number of educated women in the younger age groups. The number of educated women over 40 years old (see * in Chart 12) is so small that generalizations cannot be made from the number of child deaths that they encountered.

Chart 12: Child Mortality Rate by Age Five Years According to Mother's Age Category and Education

AGE (IN YEARS)	CHILD MORTALITY RATE PER 1,000 BIRTHS			
	NO ED	N	SOME ED	N
UP TO 30	183	22	52	15
30 - 39	247	15	172	9
40 -49	219	11	*428	1*
50 or MORE	336	23	*500	1*

The interviews indicate that only 17 percent of the female family members do not know about child immunization, one factor that improves child survival. None of the women who do not know about child immunization had received any education. Of the 10 percent of the men who do not know about child immunization, more than half had received some education. The interviews also show that, of the 23 percent of the women in the sample who depend on traditional cures or "drug peddlers" to treat a sick child, all but one had received no education. Half of the men who said that they use traditional cures or modern drugs sold in the village to treat a sick child had received some education. Evidence of the impact of women's education on child health and child mortality is abundant in the interviews; *how* a woman's education has these impacts will be explored in Chapter IV.

C. Child Education

Each person who was interviewed supplied as much information about his or her siblings' educations as they could remember. Within these "sibling sets"¹⁰ the percentage of the boys and the percent of the girls who had received various amounts of education were calculated for each set. This larger sample of individuals--the entire families of all 150 people who were interviewed--allows an exploration of both how access to education in the Dagomba area has changed over time and the differences between girls' and boys' access during that time period.

¹⁰ If more than one sibling was interviewed, then the set of siblings was only considered once in the calculations.

Chart 13: Mean Percent of Brothers and Sisters with No Education, Primary Education, and More Than Primary Education According to Age Category

AGE (IN YEARS)	SISTERS (%)			BROTHERS (%)		
	NO ED	THRU 6 YRS	MORE THAN 6 YRS	NO ED	THRU 6 YRS	MORE THAN 6 YRS
UP TO 30	60	40	27	41	59	30
30 - 39	74	36	24	51	49	30
40 - 49	96	4	2	70	30	17
50 OR MORE	94	6	1	76	24	16

While the Dagomba family members who were interviewed often felt that formal education was not particularly useful for their children, both due to the content of what was taught and the quality of education that was offered, clearly more children are gradually being sent to school. Most parents said that education was equally useful and important for boys and girls, a belief that is reflected in the fact that men and women who had not been fostered had received almost the same average amount of education--a mean of 5.95 years for men and 5.56 years for women. When asked to explain any variations among the amounts of formal education that their children had received, not a single one of the family members who were interviewed mentioned any difference in the importance of education for boys or girls.

What does make a difference in the likelihood that a child will be sent to school is whether or not his or her mother and father have been to school. Because many of the children of those who were interviewed were not yet old enough to have completed their schooling, the amount of education that they had received is not a good indicator of their parent's support for their education. Instead, percentages of school-aged or past school-aged sons and daughters who had received some--any amount of--education were calculated and correlated with the amounts of education that their parents had received. While a father's amount of education is not significantly correlated with the percentage of his sons who have been sent to school,¹¹ it is significantly correlated with the percentage of his daughters

¹¹ $r = +.24$, $\text{prob} > .05$

who have received some education.¹² Mothers' educations are significantly correlated with both the percentage of their sons¹³ and their daughters¹⁴ who are educated.

If parents are separated into categories of those who have no education and those who have received some education, then the relationship to whether or not their children are educated can be more clearly seen. The following chart shows the mean percentage of sons, daughters, and foster children who have been sent to school by their mothers, fathers, and foster parents, with and without education. Not all of the 150 family members who were interviewed appear in each row: some had no children; some did not have any children old enough to have gone to school; some only had sons or only daughters; and many did not have any foster children.

Chart 14: Mean Percent of Children Sent to School by Parents According to Education

	MOTHER (%)				FATHER (%)			
	NO ED	N	SOME ED	N	NO ED	N	SOME ED	N
SONS	56	46	88	12	63	18	87	12
DAUGHTERS	30	48	76	15	42	21	96	12
FOSTER SONS	-----		-----		51	9	78	6
FOSTER DAUGHTERS	13	39	89	7	-----		-----	

As previously discussed, 74 percent of the women who were interviewed had been fostered in their childhood and 23 percent of the men had been fostered. Of the women who were interviewed, almost half--47 percent--have or have had foster daughters old enough to go to school; of the men, 29 percent have or have had foster sons old enough to attend school. From these figures it is not clear if the same ratio of fostering--approximately three girls for every boy--will be maintained in the present generation, but two things are apparent: (1) many more girls than boys are fostered; and (2) the same patterns for educating foster children that existed in their parents' generation continue, with 62 percent of foster sons receiving some education, while only 25 percent of foster daughters are educated.

¹² $r = +.49$, $\text{prob} < .01$

¹³ $r = +.27$, $\text{prob} < .05$

¹⁴ $r = +.52$, $\text{prob} < .01$

The above chart indicates that parents, both mothers and fathers, who have had some education are about twice as likely to send their children, both sons and daughters, to school as parents who have not attended school. Parents who have had no education are more likely to send their sons to school than their daughters. Mothers who have received some education are almost as likely to educate daughters as sons; fathers who have received some education appear to be more likely to educate daughters than sons. The word “appear” is used because there is a tendency among some of the older men when describing their children and their children’s educations to not always include as their daughters those girls who had been given to other relatives to raise. Mothers, on the other hand, include these girls as their daughters, which means that their daughters, of whom 76 percent were sent to school, include girls who were fostered and over whose education their mothers had little control. Consequently, the practice of fostering even has an impact on analysis of daughters’ educations, making the impact of the mother’s education conservative, because she is including as her daughters those who are being raised by others, and enhancing the impact of the father’s education, because he is more likely to only include as “daughters” those who were raised in his household.

The greatest impact indicated in this chart is that of a mother’s education on her foster daughters’ educations. Only 13 percent of foster daughters are sent to school when their foster mother has no education; 89 percent of foster daughters are educated when their foster mother has received some education. When this impact is considered in terms of the high percentage of girls who are fostered, then the impact of a woman’s education on the next generation of girls, both her own daughters and her foster daughters, becomes immense.

Northern Ghanaians assume that education leads to a “government job” and the family members with more education do tend to live in a more urban context¹⁵ in which their children will need an education in order to secure a livelihood. Living away from the family farms means that the skills considered necessary for rural life are not being taught to their children; this means that they feel a greater need to support their children’s education. In addition, the quality of schools in town is usually better and access to them is easier. Consequently, parents who live in more urban contexts send a significantly higher percent of their sons¹⁶ and daughters¹⁷ to school.

One of the uncomfortable discoveries of this research was finding that a growing number of educated Ghanaian youths, not only Dagomba, nor even necessarily northern Ghanaian, cannot find a role for themselves in their society. Courses in hair dressing or tailoring are a frequent follow up to secondary school leaving for girls, but, as a local educator commented, “the community only needs so many hair

¹⁵ Living in a more urban context is significantly correlated with having had more education: $r = +.25$, $p < .01$

¹⁶ $r = +.32$, $p < .01$

¹⁷ $r = +.41$, $p < .01$

dressers and seamstresses.” Given the supportive nature of Ghanaian family structure, these youths, both male and female, fall back on their families for support while they look for a job. The few jobs that exist are often so unappealing that their search is lethargic and sometimes unending. This situation often leads to a marginalized lifestyle, which can include alcoholism, drugs, and illegitimate children. The Dagomba do not want their children to leave, but without migration to the cities of the south or a change in the employment possibilities in the local area, this problem will grow even with the current low level of boys and girls who receive an education. And, as it becomes a more apparent outcome of education, Dagomba interest in educating their children is likely to decrease.

D. Koranic Education

In this study, when “education” has been discussed, it is formal schooling that is meant. All of the statistical data that have been presented include only the number of years of *formal* schooling as the “amount of education” or only individuals with some *formal* education in the “some education” category. For the Dagomba, however, this is not necessarily their assumption about education. Of those who reported that they had attended school, about half had attended a Koranic school in their childhood.

Chart 15: Women and Men with No Education, Koranic Education, or Formal Education

PERIOD OF CHILDHOOD	WOMEN (%)			MEN (%)		
	NO ED	SOME KORANIC	SOME FORMAL	NO ED	SOME KORANIC	SOME FORMAL
DURING PRIMARY SCHOOL YRS	41	30	27	6	20	26
DURING MIDDLE SCHOOL YRS	74	10	14	21	12	19
DURING SECONDARY SCHOOL YRS	93	0	5	35	8	9

In principle, all Muslim parents are expected to ensure that their children receive a Koranic education. Traditionally, Koranic lessons are given at a Malam’s house, the Malam receiving as payment gifts from his students’ parents and/or work by the students on his farm. According to those who were interviewed, girls have attended Koranic classes since at least the 1930s, but boys and girls were instructed separately. Since 1957, Koranic schooling has often been offered at the same location as

formal schooling, with Koranic lessons generally being given after students have completed their formal classes each day. The Koranic curriculum consists primarily of learning to recite and read the Koran and learning how to offer Muslim prayer, including the performance of ablutions and the correct selection of verses for specific individuals and occasions. The Dagomba Malam who was interviewed said that a bright student generally takes about five years to finish learning to recite and read the entire Koran, but many students take much longer, especially if they are required to do a great many farming or household tasks. Continuing a Koranic education beyond this point is usually considered training to become a Malam and is uncommon among girls.

There are several reasons that Koranic educations have been ignored in the analysis of education's impact on fertility, children's health, and children's educations. From the above description, it is clear that what is being learned in a formal school and in a Koranic school is quite different. In addition, the Koranic schooling experience is also different: girls and boys are taught separately, classroom discipline and teaching techniques appear to be different, the length of classes is much shorter, and the number of years of schooling that have been completed has a different meaning. Because of these differences, it seemed wiser to not combine the impacts of the two types of schooling, but rather to separate them and consider the impact of a Koranic education independently.

The following chart reexamines the contrasts that were made between parents with and without education in terms of fertility, child mortality by years of age, and the percentage of their sons, daughters, and foster children who have been sent to school. While the figures for those mothers and fathers who have received some formal schooling remain the same, those without formal schooling have been separated into two categories--those who have never attended any type of school and those who have received some Koranic education.

Chart 16: Comparative Social Impacts of No Education, Koranic Education, and Formal Education

	WOMEN			MEN		
	NO ED	SOME KORANIC	SOME FORMAL	NO ED	SOME KORANIC	SOME FORMAL
MEAN FERTILITY	4.98 (N=41)	4.27 (30)	2.54 (26)	7.66 (6)	11.80 (20)	6.12 (26)
CHILD MORTALITY RATE BY FIVE	349 per 1000 births (35)	201 per 1000 births (29)	185 per 1000 births (19)	157 per 1000 births (6)	254 per 1000 births (15)	131 per 1000 births (20)
% OF SONS SENT TO SCHOOL	49% (27)	67% (19)	88% (12)	61% (4)	63% (14)	87% (12)
% DAUGHTERS SENT TO SCHOOL	34% (29)	24% (19)	76% (15)	51% (5)	36% (16)	96% (12)
% FOSTER CHILDREN SENT TO SCHOOL	18% (22)	6% (17)	89% (7)	0% (1)	57% (8)	78% (6)

This chart indicates that, while some Koranic education may slightly decrease a woman's fertility as compared to women who have received no education of any kind, a Koranic education greatly increases the average number of children that a man fathers as compared to men who have never attended any type of school. This is not surprising, as Dagomba men who are Muslim are taught that it is their duty to have as many wives and as many children as possible. Fati's story indicates how this belief can be at odds with the desire for fewer children which is associated with either a man's or woman's formal education.

Child mortality rates by five years decrease for women with education of any kind, although the largest decrease occurs with formal education. Child mortality appears to increase when a father has a Koranic education, but this result could merely reflect fluctuations due to the small number of men with neither Koranic nor formal education and/or the larger number of children that men with a Koranic education have.

The clearest patterns of impact related to the educational status of mothers and fathers emerge in relationship to the formal educations of sons, daughters, and foster children. A higher percentage of sons are sent to formal school if either their mother or father has had some Koranic education than if their parent never attended any school; an even higher percentage of sons attend formal school if either of their parents has had some formal education. This is not the pattern, however, for daughters. A smaller percentage of daughters is sent to formal school if either their mother or father has received some Koranic education than if neither parent had attended any school, while a much higher percentage of daughters receives an education if either parent has had some formal schooling. The different patterns of relationships between parents' and sons' educations and parents' and daughters' educations is even more pronounced for foster parents and foster sons or daughters. Although the numbers are very small, the relationships between foster fathers' education and the percentage of their foster sons who are sent to school appear to follow the same patterns as that between parents' and sons' educations, the smallest percentage of foster sons being educated when the foster father has no education, a higher percentage being sent to school when their foster father has some Koranic schooling, and the highest percentage of sons attending school when their foster father has some formal education. For foster daughters, the pattern is also the same as that between parents' and daughters' educations, the smallest percentage of foster daughters being educated when the foster mother has some Koranic education, a higher percentage being sent to school when their foster mother has received no schooling, and the highest percentage of daughters attending school when their foster mother has some formal education. Within this Dagomba family, parental formal education improves the chances that all children--sons, daughters, foster sons, and foster daughters--will be educated, while parental Koranic education only improves the chances that boys will be sent to school and decreases the likelihood that girls will be educated.

For this Dagomba family, Koranic education appears to rarely have a positive impact on fertility, child mortality, or child education. Women who have some Koranic schooling have fewer children and a lower child mortality rate than women with no education; a higher percentage of sons receive an education if either of their parents have received some Koranic schooling than if they have had no schooling. On the other hand, a Koranic education appears to have a negative impact by increasing the number of children that men will have, increasing the mortality rate for those children, and decreasing the likelihood that daughters or foster daughters will be educated.

IV. How Does Education Change the Girl and Her Life?

A. Marriage

The education that women have received could have an impact on the number of children they have, the health of their children, and the amount of education those children receive if their education changes the age at which marriage occurs. The argument has been made that education leads to a later age of marriage and that this delay is partially responsible for the correlations generally found between increased amount of women's education and decreases in fertility, decreases in child mortality, and increases in amount of child education (Blumberg, 1989; Jejeebhoy, 1996; Salaff, 1976; Senanayake, 1990).

In Ghana in general, the amount of education women have had is related to their age of marriage: the mean age of marriage for women with no education was 17.2 years in 1987, 18.0 years for those with one to six years of education, and 19.9 for women with seven to ten years of education (Oppong, p. 28). For this Dagomba family, however, there is no significant correlation between the amount of education a woman has had and her age at first marriage.¹

While marriage could be the basis for the social impacts of girls' education in some societies, this does not appear to be the case in Dagomba society. The mean age for first marriage among the women who were interviewed is 18.9 years, well past the point when almost all of them had completed their educations. Only six of the 98 women who were interviewed said that their schooling was interrupted by marriage; most said that they had either never attended school or had completed their education by the time of their marriage. No significant relationships were found between the age at which the women who were interviewed were first married and (1) the number of children they had given birth to, (2) the number of their children who had died before the age of five years, or (3) the percent of their children who were sent to school.

Yet Fati's story is a reminder that, as the number of girls who receive more education increases, tension between education and marriage might also increase. Dagomba marriages have specific characteristics that could make that tension less than is experienced in many cultures. Unlike marriages in many rural and traditional cultures, Dagomba marriages already share many characteristics with those in modern Western societies: they are frequently contracted due to the personal choice of spouse or "love" rather than arranged; they are unstable and divorces are frequent; husbands and wives generally maintain separate control over their own resources, living spaces, and activities; and husbands and wives often spend long periods of time apart from one another. On the other hand, all of the Dagomba women who

¹ It is important to remember that the age at marriage women reported was, in most cases, an estimate.

were interviewed had been or were married; it is considered important for a woman of childbearing years to be married and, due to the practice of polygamy, a husband can always be found.

Chart 17 shows the reasons the men and women who were interviewed gave for why they had married the first time. There is a large difference between the percentage of women and men who mentioned wanting children as the reason for their first marriage. This difference, which is influenced by education, will be discussed later in the context of decision-making. But, for both men and women, wanting to marry the specific person whom they had selected was a major reason for marriage.

Chart 17: Women's and Men's Reasons for Their First Marriage According to Education

REASONS	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
FAMILY ARRANGED	50	25	8	9
PREGNANT	4	17	-----	4
WANTED CHILDREN	8	4	46	35
COULD NOT LIVE ALONE	4	4	4	4
NEEDED HELP	-----	4	8	13
PERSONAL CHOICE OR "LOVE"	34	46	34	35
	100	100	100	100
N	68	24	26	23

More women have their marriages arranged for them than choose to marry a specific man, but, for a traditional, rural, and primarily Islamic culture, the presence of so many marriages in which women played an active role in selecting their husbands is unusual. Ninety percent of the men who were interviewed said that no one other than themselves arranged their first marriage; fifty percent of the women said that no one arranged their marriage. The frequency of having had their first marriage arranged for them appears to be constant for all ages of women who were interviewed. While the instance of arranged marriages in this family show little decrease over time, educating women is having an impact. Women with some education have fewer of their marriages arranged by their families than women with no education; the percent of women who select their own husband increases with education. Among the men who were interviewed, education has little impact on the ratio of arranged to personal choice marriages.

However, the decision whether a woman will have her marriage arranged for her or whether she will select her own husband is often not in her hands and, as the following stories indicate, many factors other than education can influence her marriage.

34 years old, 0 years of education²

My father's mother's sister, who had been the foster mother of my foster mother, had no children of her own. She claimed the privilege of deciding my marriage and, because of her childless state, she could not be denied. She wanted to give me to a man who impressed her by giving her gifts. He was old and already had three wives and I did not want to marry him. I ran away to my mother's brother until my family brought me back and preformed the marriage customs. I have been married to this man for eight or nine years but have never had a conversation with him.

85 years, 0 years of education

My father had a favorite among his gong-gong beaters (a type of drummer who announces messages for the chief's household to the village, memorizes the family tree of the chief, and composes chants and songs in praise of the chief). He was so pleased with him that he gave me to him as a wife.

27 years old, 1 year of education

A man wanted to marry me and I refused him. So he told his father, who reported it to my mother's mother. She insisted that I marry this man. I had one child with him. Because I didn't love him, I only stayed with him for four or five years. I remarried because I was still young.

28 years old, 14 years of education

When I was 18 my family arranged a marriage with a wealthy, illiterate man who wanted a second wife because his first could not have children. I did not want to marry an illiterate and, also, I had a boyfriend at school. My family did not want me to marry my boyfriend because he was only a trainee accountant and not a Dagomba. I gave in to the extreme pressure, primarily from my aunts.

36 years old, 12 years of education

I had finished middle school. I wanted to continue to secondary but my father made me stop to get married. My father tried to arrange a marriage, but the man he chose already had two wives and said he was not yet ready for a third. So I asked to select my own husband, which I did. I am the first of my husband's two wives and have had five children.

40 years old, 0 years of education

² All comments are from women unless otherwise indicated.

My father gave me to his friend. I never even met him until the wedding night. I had seven children with him. He died nine years ago and my mother's brothers are now trying to force me to find another husband.

A breakdown between women with and without some education in Chart 18 shows a shift in the frequency with which they marry into different positions in the household. First wives have more power to make household decisions, and a higher percentage of women with some education become a man's first wife than do women with no education. When women of different ages are compared, there is no systematic change over time in the position that women married into in their first marriage when women of different ages are compared, which suggests that these differences are not due to the increased amount of education among younger women.

Chart 18: Women's Position in First Marriage According to Education

POSITION	NO ED (%)	SOME ED (%)
1ST WIFE	45	71
2ND WIFE	29	21
3RD WIFE	16	4
4TH WIFE	6	4
5TH WIFE	2	-----
6TH WIFE	2	-----
	100	100
N	64	24

One reason that age of first marriage has little impact on amount of education lies in the relatively late age of marriage for Dagomba girls in comparison to many other African societies. It is possible that the lack of benefit a girl's family will receive from her marriage, due to the small brideprice that will be paid, in comparison to the loss of a daughter and her labor, may postpone her marriage date.³ Most of the first marriages made by men and women in this family involved the payment of a brideprice of kola nuts and a white cock, a small amount of money, or some other token payment. In contrast, brideprices among neighboring ethnic groups in northern Ghana were generally four cows or their equivalent in 1952 (Goody, 1982, p.104).

³ On the other hand, one woman said that, according to Dagomba belief, if there are unmarried females who are old enough to be married in the household, "angels will not visit the house" and the family will try to get rid of the young women to prevent bad luck.

The brideprices that were described as large by family members generally included money to be used on the wedding itself or to purchase household goods to be brought to the marriage. Larger brideprices were also often considered an indication of the love of the husband for his bride-to-be:

42 year old, 0 years of education

My husband had been in love with me for many years before we got married, so he gave my grandmother a very large amount of money. The husband himself determines the amount of the brideprice he will pay.

25 years old, 4 years of education

My father had tried to arrange a marriage for me but I refused to comply and I chose my own husband instead. My husband's father paid a very large brideprice to my father because it was a love match rather than an arranged marriage.

57 years old, 0 years of education

My husband chose me. The marriage was organized by my uncle and my husband, but with my consent. A large amount of money and kola nuts were paid. My husband loved me well and that is why he paid so much.

One of the oldest women interviewed said that when she was a girl no brideprice was presented to the woman's family at marriage. The tradition then was that a bride took a "trousseau" into her new family. "This meant that the aunt you lived with would give you a calabash and piece of homespun cotton cloth to take with you." Henrietta is currently accumulating pots and pans to give to one of her foster daughters for her marriage. The pots and pans that all women are expected to bring to their marriage are generally of far greater value than the amount the man presents as brideprice to his wife's family.

Low brideprices are generally interpreted as reflecting a weak attachment of wives to their husbands' families (Goody, 1982). Without a permanent absorption of wives into their husband's families, indicated by practices such as a high brideprice or widow remarriage to husband's brothers, marriages are less stable and divorces are more common. Among the Dagomba, brideprices are low and divorce is common (Abu; Barker, 1986; Oppong, 1973).

Among the family members whose first marriage has ended, the reasons given for the end of the marriage varied between men and women (see Chart 19). For women, the death of their spouse is the most frequently given reason and far more common than it is for men. There is a relatively large difference in men's and women's age at their first marriage, a mean of 18.9 years for a woman and 24.9 years for a man, and men continue to acquire new wives late into their lives, as in the case of BB with his new young bride. Due to these age differences, women are more likely to experience the death of their spouse than are men.

Chart 19: Reasons for the End of First Marriage

REASONS	WOMEN (%)	MEN (%)
DEATH OF SPOUSE	43	22
DIVORCE	20	67
WANTED MORE CHILDREN	22	11
WITCHCRAFT	13	
N	30	18

While no men reported witchcraft as the reason for the end of a marriage, quite a few women did. The Dagbani word used to name a co-wife is always translated into English as “rival” and witchcraft provides part of the context within which these rivalries are played out.

40 years old, 0 years of education

My marriage was arranged when I was about 10 years old.⁴ My father’s mother liked my husband because he brought her yams, so she gave me to him. I left because my husband’s first wife was a witch who killed my son and wanted to kill me too. I was still of childbearing age so my father told me to marry again.

65 years old, 0 years of education

My father gave me to a friend to marry. I was the sixth of his six wives. When he died, I remarried, the fourth of four wives. My rivals gave me a lot of trouble, so that marriage ended. I was the third wife of three in my last marriage. One of my rivals used witchcraft to make me fall ill. That was when I became deaf.

85 years old, 0 years of education

I have been married three times. My first marriage was arranged when I was five years old. My father gave me to his friend. This marriage ended because I got sick. Someone in the household tried to kill me through witchcraft. But I wanted more children, so I married again.

The rivalries among wives of the same husband and husband’s acquisition of new wives can, and often do, lead to divorce. While a woman will almost always remarry if she is still of childbearing age, she will usually have a number of wives preceding her in a second marriage. At the same time, she will generally not be young enough to gain power by being the household head’s new sexual favorite and/or may find it difficult to become a new mother. In addition, when women leave a marriage, they leave all of their

⁴ Although marriages are frequently arranged at such early ages, the girls do not actually marry their husband and move to his compound until they are around 16 years old.

children with the children's father. Men can, consequently, secure the children, which they state as their primary reason for marrying, without remaining married to the children's mother. Because divorce can have these very different consequences for men and women, they frequently do not view divorce in the same manner. Men are often casual about their wives leaving them and sometimes give what appear to be trivial reasons for divorcing their wives. Some men said:

75 years old, 0 years of education

I have had a total of nine wives, but there are only three left now. I divorced six wives because they were disturbing me too much. I have 22 children.

35 years old, 0 years of education

My first wife left because she said that I liked my second wife more than her. I wanted two wives, so when the first wife left, I married again to replace her. I have 11 children.

34 years old, 5 years of education

My first wife went away after having her first child, but while she was away she got pregnant by another man. So that was the end of the marriage. I didn't want to be alone, so I remarried.

55 years old, 0 years of education

Only one of my three wives is left. In our family, we don't marry only one wife. One marriage ended because that wife was disobedient. The other ended because that wife was not willing to live in peace with her rivals. I have had 11 children.

75 years old, 0 years of education

I have had six wives in total but there are only two left now. The first died, the second left me, and the third also left me. The fourth wife went to visit her father and he didn't allow her to come back to me. The fifth and sixth wives are still with me. I had 26 children.

46 years old, 6 years of education

I have had two wives. I married the first time because my mother was old and there was no one to cook for her. My second marriage did not last because she was always moody and never smiled. I have seven children.

Women take a less active role in initiating divorce, often staying for many years and having many children before they leave a difficult marriage. From a woman's perspective, having children or not having children often plays a key role in the durability of marriage from a woman's perspective.

60 years old, 0 years of education

I chose to get married. It was my father's side which was supposed to choose a husband for me, so when I made my choice they were not happy about it. When I failed to have children after four years in that marriage, my father's relatives came to fetch me away from my husband. I married

again but that marriage ended after six years because I wasn't having children. I married a third time because I wanted to have children and now have had eight children.

34 years old, 6 years of education

The first time my father forced me to marry. I stayed with my husband for 10 years but I never loved him. So, after I had given him two children, I left him. I had met another man whom I wanted to marry.

50 years old, 0 years of education

The first time that I married, my father gave me to his friend. I was my husband's tenth wife and had five children with him. I left him because I had terrible problems with my rivals. They wanted to kill me. I chose my second husband, but he was a useless man. He didn't want children and I did. I married my third husband because I wanted more children. My third husband had one previous wife and I had trouble with her. She did her utmost to get rid of me and she succeeded.

68 years old, 0 years of education

My marriage was arranged while I was still a child and I was forced to marry against my will. I never loved him and left after two years. As a young girl you can't stay on your own without being married, so I married again. After seven years I had not had a child, so I left of my own accord because I was of no use to my husband.

Men in this family have more marriages than women, both because men have more divorces and because they often have more than one wife at the same time. Education does, however, have a slight impact on the number of marriages that a woman has and a large impact on the number a men has. While the relationship between amount of education and number of marriages is not significant for women, it is for men.⁵

⁵ $r = -.32$, $\text{prob} < .05$

Chart 20: Number of Marriages According to Education

NUMBER OF MARRIAGES	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
ONE	70	84	21	71
TWO	24	12	34	8
THREE	6	4	21	17
FOUR TO NINE	-----	-----	24	-----
	100	100	100	100
N	68	24	26	23

However, age and number of marriages are highly correlated for both men and women.⁶ As amount of education is also correlated with age, especially for men, these shifts may not reflect a change in attitude or practice that occurs with education as much as the number of marriages increasing as individuals age.

While a girl's education does not have an impact on the age at which she will marry in this family, it has an impact on the type of marriage that she will make, and the type of marriage may increase her status and decision-making power within her household. There is a relationship between a woman having some education and the increased likelihood that she will select her own husband rather than have her marriage arranged for her. There are indications, such as the size of brideprice that a husband pays, that a woman's status is greater in a marriage of mutual selection than in an arranged marriage. Having had some education also increases the likelihood that a woman will be a man's first wife, a position which involves increased status and decision-making power.

B. Status and Decision-making Power

Another answer to the question of how educating girls leads to changes in fertility, child education, and child health is that education increases the status and empowerment of women. The argument is that the increased status and empowerment of women allows them greater decision-making power in their households, which results in changes in fertility, child health, and child education because women are more concerned with these issues than are men. There is evidence that women, if they have the power to exercise their choices, will opt for fewer children and spend resources to secure child education and child health (Blumberg, 1985,1989; Gulati, 1985; Kerner, 1986; King, 1990; LeVine, 1980, LeVine et al, 1987).

⁶ For women: $r = +.47$, $\text{prob} < .01$; for men: $r = +.62$, $\text{prob} < .01$.

Among the members of the family whom we interviewed, changes in status and decision-making power are limited by both the lack of status associated with education among the Dagomba and the nature of the household within which decision-making occurs. While education does not always increase the status of either men or women and appears to have little impact on women's decision-making power in the larger, extended family, it does increase a woman's role in decisions that directly affect fertility and child health.

The Dagomba attitudes about formal education frustrated the British colonialists who assumed that education would be perceived as an opportunity to alter one's status as it was in their own society. In many ways current education specialists working in Africa make the same assumption. Attempts to make education more relevant to villagers, social marketing programs to sell the importance of education, and a number of other approaches have been tried as a means to encourage demand for education in cultures where, like the Dagomba, relatively little enthusiasm for formal schooling exists. What became very clear during the process of interviewing this family was that their reasons for not valuing formal education were rational and realistic.

The quality of education in northern Ghana has never been extremely good and has fallen to such a low level in recent years that it is reasonable to question what is gained by sending children to school where they learn so little so slowly (Word Bank, 1996). Among those who were interviewed, education is most often perceived as ultimately related to having a "government job," which includes teacher, nurse, administrator, etc. The choice parents feel that they are making in selecting to educate a child is perceived as a career choice. Education is seen as having its place in part because it can lead to jobs with cash salaries. But it is also understood that the community cannot afford to depend on those cash-paying jobs due to their relative scarcity in northern Ghana.

The Dagomba are considered to be great farmers, and their area has been called one of the "bread baskets" of Ghana. They know that both for their own subsistence and for the wealth of their community, they need farmers. Growing yams, their primary cash and subsistence crop, involves not only intense labor but also real skill that requires an extensive learning period. They do not believe that a child can both go to school and learn to farm. And farming is seen as paying for the luxury of education for others. Some men said:

33 years old, 10 years of education

It is the farmers in the household who have more say because they are the ones who finance the education of the ones attending school.

67 years old, 1 year of education

The person who is not educated has the highest status because he farms and feeds his family.

Due to the intensive nature of the farming, which is done by men, cooking for those who farm, raising their children, and trading the products of the farming must be done by women. If men have

“government jobs” they will not be there to farm; if women have “government jobs,” they will not be there to cook, raise children, and trade.

In this context of low value placed on education, it is not surprising that having an education does not carry the status that we often assume it does. Education is, in fact, not seen as a positive attribute for the highest status roles--those of chief and village elders--who achieve their status through lineage and permanence in the community.⁷ The female leaders in a village, the chief's sisters and wives, gain their status without consideration of educational background. Decision-making in Dagomba society is generally a matter decided by one's social role. Each role--chief, village elder, first wife, chief's sister, etc.--has, as part of its definition, a set of responsibilities for and rights to decision-making. Education's impact on status and decision-making in the family is played out in this context and is always limited by these factors. Some men said:

35 years old, 10 years of education

The educated ones have more status because they feel they are superior by having been to school. With decisions there are usually arguments between the educated and non-educated family members because they see things differently. The illiterate family members are always concerned that the educated ones should not forget their traditions.

47 years old, 2 years non-formal education

The educated people in a family can help the uneducated ones--but sometimes when people are educated they forget their families and behave like white people. So the status depends on the character of the individual. If he is educated and he loves his family, then he will have the say in decisions and everyone will look up to him. But if he forgets his family, then no one will call him to make decisions. Then the person making the decisions will be the most senior of the uneducated family members.

Many of the women who were interviewed, especially those with no education, felt that education created status and/or decision-making power in some areas of life, but not in others.

40 years old, 0 years of education

The educated one who goes away from home can teach those back at home things they don't know, but the ones at home can also teach the educated ones about the traditional ways. With decisions, if an educated judgement is required, then the educated ones are involved, but if it is to do with traditional matters then it is the elders who decide.

75 years old, 0 years of education

⁷ While Dagomba chiefs rotate from small villages to larger villages as they prove their management skills, village elders are always permanent residents who control and monitor the decisions of the chiefs.

An educated person knows more than those who are not educated. But when it comes to decisions, those who are educated are consulted when the matter has to do with education but in traditional affairs the uneducated ones are also consulted.

48 years old, 0 years of education

One of my rivals is educated. If there is any matter requiring an educated opinion, she is the one consulted. But if the matter concerns traditional things, the rest of us are also consulted.

Men, especially men with some education, tended to see age as the key factor in status and decision-making power within the family.

32 years old, 16 years of education

It depends on the household head and the sort of family in question. If the household head chooses to consult the educated family members, he will--if he doesn't, he won't. But the elderly person--the household head--is always the boss regardless of education.

40 years old, 12 years education

Education does affect status, but the level to which you can participate in decision-making depends on your age. While your father is alive you cannot make decisions, no matter how educated you are.

54 years old, 14 years of education

Education affects your status very much. For example, I am at present living with my older brother and he seeks my advice on many things, but if I were not educated he wouldn't seek my advice because I am younger than he is.

52 years old, 0 years of education

The elder one makes the decisions, regardless of the education. Right now I am the one feeding the ones going to school in the household, but I'm not educated.

Some family members, both male and female, felt that education provided status and decision-making power mainly because of the increased access to money associated with an education.

34 years old, 1 year of education

The educated one has more status because he can protect the family from being cheated. If a decision has to do with traditional matters, the uneducated one decides, but if it concerns money then they go to the educated one because he is working for the government and has money.

30 years old, 12 years of education

Educated family members help to support the family. My cousin, who is a chief, consults us, the educated ones, even though we are young, because he's an educated man himself. Last week he

sent his educated wife to consult me about a way to get good drinking water in (our village). One reason why educated family members are consulted for decision-making is because many decisions require financial resources and they are the ones who have such resources.

23 years old, 14 years of education

Education doesn't confer status in its own right--it is only when an educated family member starts working and giving money to the other members of the family that they start respecting him.

35 years old, 0 years of education

The educated have the highest status. They will get work, get rich, and look after their family. But the eldest person makes the decisions.

The perception of education's ability to increase decision-making power also appears to be different for men and women. More women without education believe that education increases decision-making power than do women who have had some education. On the other hand, more men with some education believe that it increases their decision-making power more than do men without education (see Chart 21).

Chart 21: Relationship Between Education and Decision-Making Power According to Education

DOES EDUCATION INCREASE DECISION-MAKING POWER?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
YES	56	50	31	67
NO	6	35	37	22
ONLY ABOUT NON- TRADITIONAL MATTERS	38	15	32	11
	100	100	100	100
N	52	20	19	18

One interpretation of this difference is that these opinions reflect different experiences: men who have some education experience increased decision making power, while women with some education do not. Only two of the women who were interviewed, both women with quite a bit of education, discussed status and decision-making in terms of male and female roles. Their comments suggest that a woman's education does little to increase her decision-making role in the larger, extended family.

28 years old, 12 years of education

Education affected my status, but not while I lived in my father's house because, being a woman, one is unable to take part in decision-making regardless of educational level. But now I'm independent and I can advise my mother and she looks up to me.

32 years old, 16 years of education

Education increases your status because you earn money to help the family. However, in decision-making, women have no say, whether educated or not.

In the decisions affecting the larger family unit, the word “consult” is frequently used, implying a political process in which some household heads act as kings and others involve a wide range of family members in making decisions. Women, even with an education, do not appear to usually be consulted when these decisions are being made. However, the decisions made through this process, which are the decisions that people took us to be interested in when we directly asked about status and decision-making power, may not be the crucial ones that influence child health and education or fertility. When people were asked, in the context of discussing types of medical treatment or use of contraception, who made the decisions about what was done, then their answers almost always focused on the role of husbands and the role of wives. And, in this context, women's education does make a difference (see Charts 22, 23, 24, and 25).⁸

⁸ Ideally, an exploration of the role of education on family decision-making should include both who makes decisions and how variations in education between husbands and wives affect those relationships. The problem encountered with this family, and probably any Dagomba family, is the instability and complexity of their marriages. Because most of the men and women who were interviewed had had more than one spouse, all of the spouses of family members were seldom interviewed. Consequently, when people spoke of decision-making it was often hard to understand whether the husband or wife that they credited with making decisions was their present spouse or not. Women's children had different fathers, and men's children had different mothers, making it hard to isolate who made decisions about “children.” The responses are, consequently, about the role of the person being interviewed and any or all of his/her spouses. The specificity of the examples used to illustrate responses suggests that this amount of generalization has not led to abstract responses about who “should” be making decisions.

Chart 22: Who Makes Decisions About Type of Child Birth Assistance According to Education

WHO MAKES DECISIONS ABOUT ASSISTANCE?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	23	39	9	28
HUSBAND	46	-----	78	48
BOTH WIFE AND HUSBAND	31	61	13	34
	100	100	100	100
N	62	24	23	21

Chart 23: Who Makes Decisions About Treatment for a Sick Child According to Education

WHO MAKES DECISIONS ABOUT TREATMENT?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	9	9	-----	5
HUSBAND	89	50	86	55
BOTH WIFE AND HUSBAND	2	41	14	41
	100	100	100	101
N	66	24	22	22

Chart 24: Who Makes Decisions About Child Immunization According to Education

WHO MAKES DECISIONS ABOUT TREATMENT?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	30	42	18	16
HUSBAND	58	29	73	47
BOTH WIFE AND HUSBAND	7	17	5	32
MEDICAL PERSON	5	12	4	5
	100	100	100	100
N	57	24	22	19

Chart 25: Who Makes Decisions About Contraception Use According to Education

WHO MAKES DECISIONS ABOUT USE?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	23	39	40	21
HUSBAND	46	-----	60	43
BOTH WIFE AND HUSBAND	31	61	-----	36
	100	100	100	100
N	13	13	5	14

The most consistent similarity among Charts 22, 23, 24, and 25 is the steep increase in the number of both men and women who have received some education who say that decisions having an impact on child health and fertility are made jointly, while substantially fewer of the men and women who have had no education say that these decisions are made by both husband and wife.

As far back as 1954, Meyer Fortes, working in Ghana, pointed out that the “emergence of a strong nuclear family” would be associated with a decline in the fertility of women. Caldwell (1968), using Ghanaian data, proposed a sequence in which education indirectly triggers changes in family relationships that have the ultimate effects of reducing desired family size and encouraging the use of contraception. The changes in households that he described involved the separation of nuclear families from the larger lineage units and a shift toward joint decision-making within the nuclear families. What is implicit in these discussions is that part of what is being learned in school is a nuclear family orientation, which includes a different allocation of roles and responsibilities than when “family” is considered to involve far more than

mother, father, and children. In addition, for those who use their education to work in “government jobs,” as in the case of the chief who taught, the expectations for accommodations, travel, and social interactions are based on a nuclear family model. While relatively few of the men or women who were interviewed live in what could be described as nuclear family households, those who do tended to be those who had received some education and also those who talked about joint decision-making. And for those who did not live in nuclear households, the experience of schooling appears to have instilled an expectation that such decisions should be and could be made jointly.

In addition, education may derive part of its impact not only from changes in the girls who received the education, but also from the altered perceptions of that girl and the woman she becomes by others. The experience of going to school with girls changes boys’ perceptions of girls and women. They have female classmates treated, hopefully, as their equals; sometimes they also have female teachers. A shift in women’s perception of themselves to become persons who can and do make decisions has to be accompanied with a corresponding shift in men’s perceptions of women’s ability and right to make decisions in any society in which men have customarily had control over most of the important decisions. It takes changes in both women and men to enable the actual role of women in making decisions to change.

This change in decision-making processes was also evident in responses to questions about the attitudes of spouses of the persons being interviewed. Thirty-nine percent of the women and 30 percent of the men said that they did not know their spouse’s attitude about child spacing because they had never discussed the topic with him/her. Without ever discussing the issue, it would be difficult for any joint planning or decision-making process to have occurred. The percents of men and women who had never discussed fertility with their spouse drop significantly among those who have received some education.

Chart 26: Percent of Men and Women Who Have Not Discussed Child Spacing with Spouse According to Education

WOMEN (%)		MEN (%)	
NO ED	SOME ED	NO ED	SOME ED
44	25	41	18

In all four types of decision-making, fewer men and women with some education report that husbands alone make such decisions than do the men and women who have had no education. More women who have had some education report that they make these decisions themselves than do women who have had no education. Men with education do not, however, always see their wives as making more of these decisions than do men without education, although they are all more likely to say that these decisions are jointly made than are men without education. Education’s impact on women appears to be consistent in that more women with education report that they play a greater role in decision-making about child health and fertility, both by solely making decisions or by making decisions jointly with their

husbands, than do women with no education. Men with some education consistently see themselves as less often making such decisions solely by themselves than do men with no education, but they do not necessarily see their wives as making these decisions on their own but, rather, deciding jointly with them. Overall, these data strongly suggest that women with some education are playing a greater role in making decisions that have an impact on fertility and child health than are women who have received no education and that men with education are more likely to play a smaller role in such decisions.

Husbands and wives do not always agree on who makes a particular decision, so it is rather impressive that such clear patterns did emerge from questions that were asked privately and were scattered throughout the interview process. The specific issue that more men with education did not report that their wives made more decisions than did men without education involved the use of contraception. What men and women said about decision-making that had an impact on fertility provides some insight into this inconsistency:

Woman, 28 years old, 14 years of education

I am using a loop now because I don't feel we can afford a third child yet. I decided to use the loop and my husband doesn't even know I'm using it. And I'm not going to tell him.

Man, 54 years old, 14 years of education

I think child spacing is good because of financial hardships. I decide about these things--my wives have no say. I've had my first wife sterilized at the hospital and I have also used condoms.

Woman, 32 years old, 16 years of education

After the first child I took the pill without telling my husband because I had suffered a lot and I wanted some time before the next one. My husband was angry when he found out, but, despite that, I had a loop inserted after my second child, again without consulting him.

Man 70 years old, 0 years of education

Only one of my wives spent time away after a child birth and she never came back. In the Muslim tradition you can sleep with your wife 40 days after the birth and are not supposed to send her away. So I have used contraceptive pills, foaming tablets, and condoms for many years so that my wives could stay with me after giving birth and I could prevent us from having too many children (he has 27 children). My wives have to agree with whatever I decide.

Woman, 26 years old, 0 years of education

My husband doesn't like the idea of child spacing because he wants many children. I wanted my child to grow well before having the next one, so I have been taking the pill but my husband doesn't know about it.

Man 35 years old, 6 years of education

I don't like child spacing because you don't know which child will look after you in the future. But my wife likes it because she doesn't want many children. She had a loop fixed before informing me but I didn't mind. I leave family planning to her because she knows more about those things than me.

The gap between husband's and wife's perception of who is making contraception decisions becomes more apparent when the comments of husbands and wives are compared.

Man 35 years old, 10 years of education

My wife is illiterate--she wouldn't mind having even 100 children! She wants to have more children, and she complains about having to wait and that my family members accuse her of using contraceptives. I am using the withdrawal method to prevent another child until our daughter is stronger.

His wife, 24 years old, 2 years of education

We've never discussed it but I think my husband must approve of child spacing because he doesn't mind when his family accuses me of using contraceptives. And I don't want another child yet because we can't afford it. So I've been using a loop for 4 years now. I've never told my husband because he would make me remove it.

Man, 33 years old, 10 years of education

We have never used any child spacing. These things are up to the women. They know about them. Men don't know and they don't like the idea, but the women do because they see the suffering of poverty.

His wife, 31 years old, 6 years of education

I want my youngest girl to be 5 years old before the next child so I have been using hormone injections for 9 months now. I went to the hospital to enquire about using contraceptives, and after I'd had my blood pressure tested they gave me the injections. I pay for them myself.

Among the studies of fertility in Ghana, some research has focused on issues of decision-making. Bleek (1978) discussed factors that make decisions about having children particularly difficult in some Ghanaian cultures. The factors that he lists include: instability of marriage leading to high divorce rates; pressure from lineage members to supply children; fostering, which spreads the costs and benefits of having children; and division of financial responsibilities between parents rather than pooled resources. These are all characteristics of Dagomba households. Abu's discussion of Dagomba family planning echoes Bleek's point that family planning cannot be a rational decision based on the costs and benefits of having children under these circumstances. For women, widowhood, divorce, the arrival of co-wives, the fluctuating fortunes of their husbands, and their own limited incomes make it impossible to predict how many children can be provided for in the long term. For a man in a polygynous household, the assumption is that he can support all of the children that each wife bears; making a suggestion that any

wife limit her fertility when she is not the only sexual partner would be difficult. Men, therefore, prefer to publicly express disapproval of married women using contraception, while turning a blind eye to what a wife actually does when he is unable to provide for many children. In addition, Muslims are not supposed to use birth control. Men can absolve themselves of the guilt of going against Islamic regulation by pretending not to know that their wives are using contraception, or pretending to disapprove when they secretly condone it, or just put the responsibility on their wives by saying that it's a women's affair.

While these data suggest that receiving some education increases the likelihood that women will play a greater role in decisions about the use of contraception, it does not indicate that they will always use that role to limit their overall fertility. In a situation in which it is difficult to judge how many children can be supported and how many children are needed, the cultural pressure to have children is likely to prevail. A woman's status is derived to a large degree from the number of children that she has had. Dagomba women will go to endless trouble and expense to induce conception. Children without siblings are considered to be at a great disadvantage. And a woman without children suffers endlessly because barrenness is essentially believed to be the result of wicked intentions, either of the woman herself or of someone who hates her. The motivation for women in this family to limit their fertility, even when they have the power to do so, only begins to influence choices after three or four children have been born.

On the other hand, it can be assumed that in most instances a woman will use her power to make decisions to increase the likelihood of her children's survival and health. With a child mortality rate of almost 20 percent, this is an area of key concern for all Dagomba parents. Women are highly motivated to provide for the health of their children and are often in situations, such as the first three years of the child's life, in which the father is not even present to influence decisions unless money is needed. Here education can play a particularly important role, not only in a woman's ability to make decisions, but also in providing her with the knowledge necessary to make good decisions. This will be discussed in the next section on education's impact on knowledge.

Decision-making about children's educations has been separated from decision-making that has an impact on fertility and child health because of the role that paying for schooling plays in these decisions. As can be seen in Chart 27, men, with or without education, almost always see this as a decision that they alone make.

Chart 27: Who Makes Decisions About Child Education According to Education

WHO MAKES DECISIONS ABOUT EDUCATION?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	5	10	-----	18
HUSBAND	76	57	95	77
BOTH WIFE AND HUSBAND	7	28	-----	6
FOSTER PARENT	12	5	5 ⁹	-----
	100	100	100	101
N	58	21	21	22

Women with some education see themselves as more often making the decision themselves to educate children or jointly making the decision with their husbands than do women with no education, which is similar to the pattern found in decisions about child health issues and fertility. But relatively few of them see themselves as making this decision, either alone or jointly. Among the child health decisions discussed above, men, with and without education, also tended to see the decision as theirs to make in the case of selection of treatment for sick children. Decisions about schooling fees and cost of modern medication for sick children are often placed functionally in the hands of fathers because Dagomba women have less access to cash than do men. The women with some education who make decisions about their children's treatment and education are generally those who have enough education to have cash-paying jobs that allow them to decide how that money will be spent. This relationship is clearly shown in Charts 28 and 29, which describe who was said to pay for the treatment of sick children or for school expenses. The relatively minor role of women in decision-making about children's education is linked to the fact that men almost always pay school expenses. To a lesser degree, women's role in deciding about medical treatment for their children is reduced by their inability to pay for the services and medications which their husbands often see themselves as paying.

⁹It is interesting that so few of the men who were interviewed indicated that foster parents make decisions about their children's educations. The simplest, and probably correct, interpretation is that men only consider those children raised in their household as "their" children, while women are more likely to think of the children that they gave birth to but are being raised in other households as still "their" children.

Chart 28: Who Pays for Treatment for Child's Diarrhea According to Education

WHO PAYS?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	20	30	7	-----
HUSBAND	68	47	79	86
BOTH WIFE AND HUSBAND	7	23	-----	7
FREE	5	-----	14	7
	100	100	100	100
N	40	18	18	18

Chart 29: Who Pays for Child's Education According to Education

WHO PAYS?	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
WIFE	5	11	-----	-----
HUSBAND	75	83	100	95
BOTH WIFE AND HUSBAND	10	-----	-----	5
FOSTER PARENT	10	5	-----	-----
	100	100	100	100
N	40	18	18	18

The impact of education on status and decision-making power is complex. Education does not always lead to an increase in status for either men or women. Most men with education believe that their schooling has increased their decision-making role, but that role is always limited by factors such as the nature of what is being decided and seniority. Women with some education generally do not see that their decision-making role has increased in the domain of decisions affecting the larger, extended family as it is generally men who make those decisions. However, both men and women with some education are more likely to say that wives make decisions, alone or jointly with their husbands, about fertility and child health than are men and women without any education. Women's power to make decisions about their children's educations is limited unless they have had enough education to secure a cash-paying job that allows them to pay school expenses.

C. The Content of Education

A third hypothesis for how education of girls is able to produce women who have fewer, healthier, and better educated children is that they learn something in school that makes these changes occur. In contrast to the last chapter, which explored the impact of schooling on girls' sense of themselves and others' perceptions of them in ways that altered their social roles, this chapter focuses on the impact of what girls learn in the classroom. What is learned can be divided into a number of sub-categories of knowledge that might lead women to have fewer children, more children, and better educated children: (1) specific knowledge about fertility, health, and the importance of education for their children; (2) literacy and numeracy; (3) familiarity with non-traditional systems for obtaining information; and (4) skills that can be translated into wage-paying jobs.

The specific context of northern Ghana and the villages in which most of the family members who were interviewed live is of special importance. They live in a world with little access to T.V., and limited access to radio broadcasts. Generally, they are miles from the nearest paved road where health clinics and family planning services are located. Their schools usually have only one or two teachers for all grades and these teachers may not show up or stay for the assignment, may not speak the local language, and probably have not had any training. Nevertheless, given the lack of access to information in their environment, men and women who have had some education are able to use the knowledge and skills that they do acquire to make changes in their lives and the lives of their children.

The reasons that the family members who were interviewed gave for the usefulness of education varied among those who had received some education and those who had not.

Chart 30: How Education Is Said to Be Useful According to Education

USEFUL FOR	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
JOBS	38	15	30	32
KNOWLEDGE	25	45	10	24
INDEPENDENCE	7	10	10	20
LITERACY	18	5	35	16
NOT TO BE CHEATED	11	25	15	8
	100	100	100	100
N	55	20	21	23

While the possibility of getting a cash-paying job and being literate were the reasons most often given by both men and women who had received no education, literacy was less likely to be given as a reason by men and women with some education and getting a job was far less frequently mentioned by women who had received some education. Instead, almost half of the women with some education gave knowledge as the most important benefit of education; the frequency of men who saw knowledge as the primary value of education more than doubled. The problem is to understand what they meant by “knowledge.”

1. Knowledge about Fertility, Health, and Education

BB is an example of an individual who received an education and translated this into a consistent attempt to educate his children. His educated wife, Florence, is another example; she not only educated her child, but also most of her foster children. This is generally true among the family members who were interviewed; those who had received some education were more likely to have children who were educated. The high correlations between parents’ educations and the percentage of their children that they choose to send to school have been discussed in Chapter II on The Impact of Education (pp. 25-26). Choosing to educate one’s children can be seen as a matter of knowledge: parents understand what information education has given them and how it has changed their lives, and wish the same for those for whom they can make that decision.

Access to information about fertility and health is limited in rural northern Ghana, and the family members who were interviewed often knew very little about modern techniques. For example, when women and men were asked about specific techniques for child spacing, their knowledge was often found to be incomplete and distorted. Some women said:

50 years old, 0 years of education

I took the pill because I wanted to become pregnant. After my periods stopped a soothsayer told me that there were still two children in the future for me. My junior sister advised me that the pill would make my periods start again, so I would be able to get pregnant again. My sister told me to take two pills every other day, but the first day I took them I developed a severe stomach upset so I stopped taking them.

40 years old, 0 years of education

I took the pill because I wanted to grow fat. I knew other women who had put on weight through taking the pill and I wanted to have a bigger bottom, which would shake when I walked, so that my husband would admire me. I got them from a drug peddler. But I only took them for a month because I felt so weak and ill. If I had told my husband, he would have beaten me.

40 years old, 0 years of education

After our second child we couldn’t even afford to perform the out-dooring ceremony so when I became pregnant again we decided that I should have an abortion. After the abortion they did

something to stop me having children and they told me that if I wanted to get pregnant again I should come to the hospital and they would turn my womb.

Some men said:

61 years old, 0 years of education

I think contraception is fantastic. Because of the little money I have the young girls chase me. There was one of them I wanted to sleep with, but I told her that I didn't want her to get pregnant. So she said she had something to prevent it. She had contraceptive pills and said we should both take one. So I swallowed one and so did she.

46 years old, 6 years of education

Left to me, I wouldn't be interested in child spacing, but my wives want to practice it because they find it embarrassing to have their children very close together. I write Koranic verses on a slate with a special substance. My wives drink the water used to wash off these words and that stops them from getting pregnant. When they are ready for more children, I will write different verses for them and then they can conceive again.

35 years old, 10 years of education

I've heard of a local method by which the man takes 4 Paracetamol pills mixed into palm wine-- that kills the sperm. This mixture is also used to cause an abortion in women.

Both men's and women's knowledge of modern contraceptive techniques is directly related to the amount of education that they have received. The number of techniques that the women who were interviewed were familiar with is extremely highly correlated with the amount of education that they have received;¹⁰ the number of techniques that men were familiar with was less highly, but still significantly, correlated with the amount of education that they had received.¹¹

Chart 31: Mean Number of Contraception Techniques Known According to Education

	WOMEN		MEN	
	NO ED	SOME ED	NO ED	SOME ED
MEAN #	2.37	5.14	2.90	3.58
N	63	22	20	24

¹⁰ $r = +.71, p < .01$

¹¹ $r = +.29, p < .05$

Yet very few individuals indicated that they had learned anything about child spacing or medical treatments in school. This suggests that this information was not specifically taught in the Ghanaian school they attended but that something else they did learn changed their access to and interest in the type of knowledge. Separate studies need to be undertaken in countries where government policy has specified that fertility, child education, and child health are targeted in the content of the curriculum that is taught in order to understand what is gained by this more direct approach.

2. Literacy and Numeracy

When the women who were interviewed discussed how education had been useful to them, or would have been useful if they had received it, they often described uses that we forget about--simple things that it is easy to take for granted unless you are unable to do them.

57 years old, 0 years of education

Education is good for finding your way around, reading road signs, etc. For example, when I go to the hospital, I have to take an educated child with me to help me to find my way around.

23 years old, 10 years of education

I have used my education in learning professional sewing. I could not have followed the course without education because it involved writing.

38 years old, 0 years of education

Education allows you to read letters and speak English. Educated women can read prescriptions and take proper care of their children.

27 years old, 6 years of education

My education has helped me to understand English and to read signboards etc. When I go into a shop I can read the prices.

55 years old, 0 years of education

Nobody can cheat an educated person. Illiterates are treated badly. At the hospital they treat you like an animal when you're illiterate. They don't have the patience to explain anything to you. But if you have an educated child, that child can translate and explain things to you.

26 years old, 10 years of education

I was trading in the market while still in school. Now I am a seamstress. I need my education to write measurements, etc, and I can also help my children with their homework. You can explain things to your uneducated relatives. I feel sorry for my uneducated sister who has nothing to do. You need an education in order to have an income and in order to be independent.

One tragic story clearly illustrated how vulnerable a lack of literacy can make a woman.

A 34 year old woman with no education had become worried when her pregnancy was advanced yet she felt no movement from the fetus. When she went to a clinic to have it checked, they found that the fetus was dead. Because she was illiterate, they did not tell her but, instead, wrote a note to her husband explaining the problem and recommending that she be sent to the hospital in Tamale to have the dead fetus removed. The note was read to her husband by a relative and he decided that he wasn't prepared to pay the hospital bill involved, so he did not tell her what the note said. She carried the dead fetus for another month before someone from the clinic followed up with a member of her family. As soon as she found out, she went to the hospital in Tamale. Now, three months later, she is still staying with her mother, who lives in Tamale, because she is not yet well enough to be away from the hospital.

Securing medical care for oneself and one's children becomes a serious problem in northern Ghana without literacy and a knowledge of English. Because so few men and women from northern Ghana have received more than a primary education, most staff members at clinics and hospitals are from other regions of Ghana and do not speak the local language. As the women have mentioned above, getting to the clinic or hospital is a problem. Once there, filling out registration forms become a humiliating task. Unless the doctor or nurse speaks the local language, trying to explain to them the nature of the problem requires an interpreter. Translation of diagnosis of the problem, choice of treatment, and instructions for the treatment is also required in a situation where staff are already overburdened and a translator is not always available. Instructions for medication or other treatment cannot be written and, therefore, may not be correctly remembered. The negative impacts of being illiterate and not speaking a language that can be used for communication outside of the local area are immense.

While most of the family members who were interviewed speak at least one language other than Dagbani, that language is often Twi, Fra-fra, or another Ghanaian language that, while useful in the market, is generally not useful in reading written material or communicating with trained professionals from other regions. The men generally speak more languages, an average of 3.10, than women do, 2.03. Sixty percent of the men who were interviewed speak some English; only 17 percent of the women speak any English. According to Chart 32 below, not all of the men who speak English have attended school, while all of the women who speak English have received some education.

Chart 32: Percent Who Speak English According to Education

SPEAK ENGLISH	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
NO	100	38	70	12
YES	-----	62	30	88
	100	100	100	100
N	71	26	26	26

The total number of languages that the men speak is significantly correlated with the amount of education that they have received;¹² the total number of languages that the women speak is even more highly correlated with the amount of education that they have received.¹³

There is less evidence of how numeracy is used to change the daily lives of women in ways that would lead to changes in fertility, child health, and child education. However, the value placed on numeracy is high. In Chart 30 (page 55), “not to be cheated” generally means to be able to calculate costs, profits, expenses, and other financial matters. As most Dagomba women, like other Ghanaian women, are involved in trading activities, numeracy is of great value to them.

3. Familiarity with Non-Traditional Models for Obtaining Information

During the process of interviewing family members, a subtle difference emerged between women who had and had not been to school. This difference was generally present whether or not the woman had attended school long enough to become literate. Those who had been to school, even for a very short period, understood the process of questioning; they were not intimidated by being singled out to be directly questioned and they knew what was expected in terms of response. Responding to a question is so basic to most of us that we may forget where we learned it, generally from tolerant parents who answered our questions long before we entered school. Dagomba social structure, as in the cultures found in many parts of the world, is not one that allows children many opportunities to ask direct questions. Learning generally takes place through apprenticeship, a process of modeling one's behavior according to what is observed. This is not necessarily the same authoritarian model in our cultural past, in which children were to be “seen and not heard,” but it shares with it a lack of opportunity for children to feel that questioning is legitimate, not threatening, and a way to exchange information. Children and adults who do not feel comfortable questioning and answering often appear to comprehend things that

¹² $r=+.39, p<.01$

¹³ $r=+.67, p<.01$

they do not fully understand, which can lead to serious misunderstandings, and do not seek out the information that they need.

One reason that women who have received some education are more likely to have more and better knowledge about fertility and child health is that education creates a shift in where women obtain information. For example, women with some education are more likely to get their information about how to treat diarrhea from medical sources than either women with no education or men, whether or not they have received any education.

Chart 33: Where Women and Men Learned About Treatment for Diarrhea According to Education

WHERE LEARNED	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
RADIO / TV	-----	5	7	22
MEDICAL SOURCE	43	71	7	28
FRIENDS	14	5	9	14
FAMILY	27	19	76	36
SPOUSE	16	-----	1	-----
	100	100	100	100
N	44	21	15	14

The number of uneducated women who say that they get their information from their husbands reflects the high percent of uneducated women who say that their husband makes decisions about child treatment and pays for the treatment for diarrhea. The major change in women who have received an education is a very significant shift to getting their information from medical sources. Education has a less pronounced impact on where men get their information: while they are more likely to get information from medical sources, they are still most likely to get their information from family members.

The information that women with education have about how to treat diarrhea, secured more often from medical sources, is better than the information than the women who have no education use to make decisions about treating diarrhea. When family members were asked how they treated diarrhea in children, education had a strong impact on what women chose as a method of treatment.

Chart 34: Treatment for Child with Diarrhea According to Education

TREATMENT	WOMEN (%)		MEN (%)	
	NO ED	SOME ED	NO ED	SOME ED
TRADITIONAL CURES	32	19	48	32
MODERN MEDICINES	32	19	19	18
DOCTOR OR HOSPITAL	25	19	28	23
ORAL REHYDRATION TREATMENT (ORT)	11	43	5	27
	100	100	100	100
N	65	21	21	22

In order to understand the significance of the shift to use of ORT, it is important to understand what the alternatives mean. Taking a child to a doctor, clinic, or hospital means a long, difficult, and relatively expensive trip that is usually postponed as long as possible to be sure that it is really necessary. Young children dehydrate very quickly when they have diarrhea and often cannot endure a number of days without treatment. Examples that women gave of “traditional methods” for treating diarrhea include:

55 years old, 0 years of education

Grind ginger and spices and push it into the child’s anus.

58 years old, 0 years of education

A stone is heated in the fire and then placed against the child’s anus, plus boiled herbs.

87 years old, 0 years of education

It would be treated by the elders with herbal cures or by spiritual medicine.

57 years old, 0 years of education

A finger is inserted in the child’s anus to wash it out with soap and water. This sometimes makes it bleed because the diarrhea is caused by sores.

In Ghana, almost any medicine can be bought legally over the counter in drugstores and illegally from “drug peddlers.” Examples that women gave of the use of “modern medicines” to treat diarrhea include:

55 years old, 0 years of education

You buy Ampicillin and Flagyl, mix them together in water and give them to the child.

49 years old, 0 years of education

I mix Terramycin, Chlorophenicol, and Sulphathiazole (a drug used to treat stomach ulcers) and give the child three doses daily for four days. The “drug peddlers” taught me about it.

36 years old, 0 years of education

I mash Septrin and Flagyl together and give them to the child. If the symptoms stop, then I stop the treatment. I learned about this from friends and asking at the drugstore.

21 years old, 0 years of education

I give them Flagyl dissolved in water. I learned about it from the drug peddlers.

4. Skills Leading to Wage-Paying Jobs

Many of the women had thought about how women specifically use their educations. Their statements support research evidence that women are more likely to use their education to benefit their families than are men.

28 years old, 14 years of education

Education makes you independent and gives you access to money so you can help your family financially. This makes them respect you. When you get married you need to pay for soup ingredients and the price of grinding corn yourself, so you need an income and this is easier if you are educated. Also, if your marriage breaks down you can look after yourself instead of becoming a burden on your father. If necessary you can even pay for your children’s education yourself.

45 years old, 0 years of education

Becoming literate makes you independent--you don’t have to find other people to read your letters for you. Also these days it is difficult to find employment without education. Sometimes when men become educated they forget about their families, but women have more interest in their families even when they are educated. If I had been educated I would have a proper profession and could give more to my family.

28 years old, 12 years of education

Education gives you your own income. My stepsisters are uneducated and they are doing nothing--they don’t even sell anything. But I can look after my relatives financially, especially when they are ill. I think education is more important for girls because they care more about their families. With men, when they marry, some of them don’t look after their parents or their widowed mothers--women are different.

Unlike many women in South Asia and the Middle East, most Sub-Saharan African women are not discouraged from participating in activities outside the home, including work. All of the women who were interviewed who had received a secondary education worked in a wage-paying job, owned their own businesses, or were seriously involved in trading activities. Pre-colonial social patterns in much of Africa preserved separate ownership and income for men and women, a separation that was not lost at marriage. In spite of an increase in the adoption of a Western-style nuclear family structure, most African women have maintained control over their own income; they do not combine what they earn with their husband's income as a shared household resource. With separate incomes come separate responsibilities, as the women in this family have pointed out: Dagomba women are expected to pay for soup ingredients used in the feeding of the household, the grinding of grain, their own personal expenses, the education of foster daughters, and some medications. When skills learned at school help women secure wage-paying jobs, the income from those jobs is under the women's control and can be used to directly support the health and education of the children in their care.

In looking for a single or major means through which education transforms girls, it is easy to overlook the accumulation of smaller changes that make it possible for women to change their lives and the lives of their children. One step is for women to have the decision-making power to make changes. But without the knowledge and information to select actions leading to positive changes, the impact of that power on fertility and children's health is reduced. And, without the skills and resources required to act on that information, the changes will still never occur.

V. Conclusion

A. Context Counts

This study, by using a single interconnected sample of people and their own memories of events to provide a longitudinal aspect, allows girls' education to be examined as it happens, within a set of social relationships. People do not live as individuals, one and one and one, as data are usually collected in surveys. People tell intertwining stories of why they did or did not attend school, did or did not use a form of birth control, treated their sick children in the ways that they did, or why they did or did not send their children to school. These stories always involve their relationships to others, mothers, fathers, husbands, wives, foster parents, village elders, and religious leaders. Change is a process, and processes, even in the most scientific of experiments, can only be understood within the context in which they occur.

This research demonstrates why an understanding of local cultural context is necessary. For example, without an understanding of traditional Dagomba attitudes about education and the practice of fostering, it is difficult to understand the low enrollment in schools in the area and the exceptionally low enrollment of girls. Today the problem in changing social factors, such as fertility, health, and education, is often not as much the ability to supply solutions as the ability to have those solutions accepted and acted upon. In order to accomplish that, cultural values and social behaviors usually have to change.

People's systems of values and behaviors are not easily altered because they are, after all, what make life meaningful. And the range in values and behaviors found in the world is immense. Local research is necessary in order to understand why people are doing what they do and what factors would be key to making a change. It is far easier to promote a few strategies and expect them to work everywhere, but this approach has generally not been very successful. This does not mean that a study of this type is necessary for every society. Useful, local research already exists in many cases, as the rich literature on the Dagomba supporting this study indicates. And, with the increased interest in decentralization and community involvement, local people can provide their own analysis of what is needed as they are brought into the process of selecting strategies to create change. However it is obtained, local, specific information is essential to understanding problems and findings ways to overcome them.

B. Impacts of Girls' Education

There are many studies that have demonstrated the relationship between the education of girls and reduced fertility, increased health of children, and increased education of children. Almost all of those studies have used a methodology that correlates the amount of education girls in a given population have received with fertility figures, various measures of child health, and amounts of children's education.

Because longitudinal studies are seen as taking too long, girls' educations in one generation are generally related to fertility, child health, and child education in the next generation. Many other factors have influenced those two generations, and generalizing across sub-cultures ignores important keys to where the linkages lie.

This research sacrifices the size of the sample that can be studied in exchange for the directness of the link. Because this study isolates actual mothers, their educations, and the number of children they have had, and the health and education of those children, it provides a concrete test of the correlations found in most studies. And the impacts were all found: the educations these Dagomba women had received in their childhoods led to having fewer children, fewer child deaths, and more of their children receiving an education.

C. How Does Girls' Education Produce These Impacts?

According to this study, none of the single answers to this question that have been offered--later marriage, increased decision-making power of women, or increased information, knowledge, and skills--appear to be a complete answer.

1. Marriage

While age of marriage can be a factor in many other societies, it does not appear to be a factor in this family in this area of Ghana. The amount of education for women in northern Ghana is extremely low, which means that very few girls stay in school long enough for it to become an issue whether they continue their education or marry. In addition, the age of marriage among the Dagomba is quite late, with very few girls joining their husbands before they are 16 years old and most marrying in their twenties.

Although the age of marriage may not be influenced by education, the type of marriage women make appears to be. This factor has usually been treated as a problem in the literature relating girls' education to social changes because better educated women often marry better educated men, which makes it difficult to differentiate between the impacts of the mother's and father's educations. For example, in the similar study that was conducted in India (Wolf and Karra, 1994), because both men and women believe a husband should be better educated than his wife, families generally select for marriage men with more education than their daughters have. In a south Indian context, this means that the more education a girl has, the more money her family will have to pay for her dowry, as the amount of dowry paid to the husband's family increases with his educational level.

This is not the case with the Dagomba, however, as education has only recently, and only among the few most educated women, become a factor in selecting a spouse. There are other differences, however, between the types of marriages made by women with and without an education. Women with some

education are more likely to be first wives, which vastly increases their decision-making power within the household. In addition, women with some education are more likely to make marriages that are mutually decided upon by the husband and wife rather than arranged by their families, which also increases the woman's decision-making power within the household.

2. Decision-making Power

Empowerment of women is clearly one of the most important avenues through which education operates. But the research in this area frequently fails to differentiate what kind of empowerment and over what kinds of decisions. Context plays a very significant role because the structures of power in societies vary greatly and cannot be easily categorized. For example, in the previous study conducted in India, one of education's main impacts was found to be altering women's ability to move out into their community on their own. In India, to varying degrees, the public world of commerce, politics, and education are considered the proper domain of men, while women's primary social roles are to be enacted in the private domestic sphere. For the Dagomba, and for most women of Sub-Saharan Africa, that is not a major factor. Most women in Sub-Saharan Africa do not limit their activities to a private, domestic sphere, and Ghanaian women are often the outside trading outlet for men's products. In the same Indian study, education played an important role in giving women a stronger voice in negotiating household decision-making with their husbands within the permanent, single-marriage pattern of India. Among the sample of family members interviewed in this study, the relationships between Dagomba husbands and wives were so unstable and varied in amount of direct contact that such decision-making negotiations often never occurred. The question has to be how education empowers women within their particular context of social relationships.

What this study among the Dagomba revealed was that education rarely enhances women's ability to make decisions about the extended family, household, community, or society because these remain in the domain of men's power. Men's education does not even necessarily enhance their role in this domain as age and other criteria confer more status. What education gives women is greater confidence and the necessary skills to act on their own or negotiate decision-making power in the domains where women do have traditional power, such as fertility, care of children, and, to some degree, education of children. This helps to explain the high correlations found between women's education and changes in these areas, but fails to support notions that educating women will necessarily lead to their increased role in other areas of life.

3. Information, Knowledge, and Skills

Empowerment and increased decision-making power, however important, are only useful in creating the types of social changes that are correlated with girls' education when they are connected to access to information for making good decisions. For example, in the study conducted in India, massive media programs had made knowledge about contraception and child health available to almost all women, whether or not they had received any education. In addition, due to the well-developed higher education

system in India, local clinics and hospitals are manned by professionals who speak the local language, which eliminates language barriers for uneducated women. Increased decision-making power, more than the knowledge or skills learned in school, increased an educated Indian women's ability to change fertility and child health.

In northern Ghana, what is learned in school--literacy, numeracy, and familiarity with non-traditional models of information dissemination--makes a difference in how women are able to exercise their decision-making power. In northern Ghana education can help to provide the many types of knowledge required to travel from a semi-isolated village to a clinic or hospital for care, as, without literacy and language skills, simply getting to the right place can be daunting. Once there, dealing with written forms and instructions or staff who do not speak Dagbani must be overcome. Knowing whether or not such a trip is necessary, or what safe and effective treatments could be practiced instead or prior to looking for professional help, requires information that is not necessarily available from traditional sources.

What the Dagomba women in this study had learned in school had an impact on the health and education of their children in an even more direct way if they had continued their education to the point that they obtained employable skills. While very few women in northern Ghana have completed secondary school or continued beyond secondary education, those who have almost always work to produce their own income. This is their money, which they spend to improve their children's health and to educate their children. In contrast, women with a secondary or higher education in the India study often did not work outside the home or, if they did, they often did not retain control over the money that they earned.

There are many factors, such as marriage patterns, cultural attitudes about women's roles, media use, employment opportunities, and language differences, that can influence whether it is through increased empowerment or increased knowledge that girls' education operates to create social changes. Isolating what changes when a girl is educated that leads to a transformed society can only be done in specific contexts, but the contrasting and comparison of those processes can lead to a better understanding of the process itself. And a better understanding of the process is invaluable in any attempt to create change.

VI. References

- Abu, Katharine. 1992. "GGAEP Target Group Survey: Dagbon Area in Northern Ghana." Study prepared for the Ghanaian German Agricultural Extension Project.
- _____.(date unknown). *Family Welfare and Work Dynamics in Urban Northern Ghana*. Labour and Population Series for Sub-Saharan Africa, No.13. United Nations Population Fund.
- Barker, Peter. 1986. *Peoples, Languages, and Religion in Northern Ghana*. Accra: Asempa Publishers.
- Bening, R.Bagulo. 1978. *A History of Education in Northern Ghana 1907 - 1976*.
- Bleek, Wolf. 1976. "Spacing of Children, Sexual Abstinence, and Breast-feeding in Rural Ghana." In *Social Science and Medicine*, Vol.10, pp.225-230.
- _____.1978. "The Impossible Decision: Having Children in Kwahu, Ghana." Paper presented at the Conference on Economic and Demographic Change, Helsinki.
- Blumberg, R.L. 1985. "A Walk on the 'WID' Side: Summary of Field Research on Women in Development in the Dominican Republic and Guatemala." Paper presented at the International Conference on Gender and Farming Systems, Gainesville, Florida.
- _____.1989. *Making the Case for the Gender Variable: Women and the Wealth and Well-being of Nations*. Technical Reports in Gender and Development No.2. Washington DC: United States Agency for International Development.
- Caldwell, J.C. 1968. "The Demographic Implication of the Extension of Education in a Developing Country: Ghana." *Population Studies*, No.2, pp.90-100.
- Fortes, Meyer. 1954. "A Demographic Field Study in Ashanti." In *Culture and Human Fertility*. edited by F. Lorimer. New York: United Nations.
- Gaise, S.K. 1975. "Fertility Trends and Differentials." In *Population Growth and Socio-economic Change in West Africa*, edited by J.C. Caldwell. New York: Columbia University Press.
- _____.1984. "The Proximate Determinants of Fertility in Ghana." *WFS Scientific Reports*, No. 53. Voorburg: International Statistical Institute.

Goody, Jack. 1982. "Circulation of Women and Children in Northern Ghana." In *Parenthood and Social Reproduction: Fostering and Occupational Roles in West Africa*, edited by Esther Goody. Cambridge Studies in Social Cultural Anthropology, Volume 35. Cambridge: Cambridge University Press.

Gulati, L. 1985. *Fertility and Choice in Kerala: Some Insights*. Women and International Development Working Paper No.12. Cambridge: Harvard Institute for International Development.

Jejeebhoy, S. 1996. *Women's Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries*. Oxford: Clarendon Press.

Kerner, D.O. 1986. *Reading at Home Is Like Dancing in Church: A Comparison of Educational Opportunities in Two Tanzanian Regions*. Working Paper No. 123. Washington DC: The World Bank.

King, E.M. 1990. *Educating Girls and Women: Investing in Development*. Washington DC: The World Bank.

LeVine, R. 1980. "Influences of Women's Schooling on Maternal Behavior in the Third World." *Comparative Education Review*, pp. 78-105.

LeVine, R. A, et.al. 1987. "Schooling and Maternal Behavior in a Mexican City: The Effects on Fertility and Child Survival." *Fertility Determinants Research Notes*, No.16.

Oppong, Christine. 1966. "The Dagomba Response to the Introduction of State Schools." *Ghana Journal of Sociology*, Volume 1, 17-25.

_____. 1973. *Growing Up in Dagbon*. Accra: Ghana Publishing Corporation.

_____. 1977. "A Note from Ghana on Chains of Change in Family Systems and Family Size." *Journal of Marriage and the Family*, August, pp. 615-621.

Oppong, Christine and Katharine Abu. 1987. *Seven Roles of Women: Impact of Education, Migration, and Employment on Ghanaian Mothers*. Women, Work and Development, 13, Geneva: International Labour Office.

Salaff, J.W. 1976. "The Status of Unmarried Hong Kong Women and the Social Factors Contributing to Their Delayed Marriage." *Population Studies*, 30, No.1, 391-412.

Senanayake, P. 1990. "Young Women and Reproduction: Offering Options and Choices." *Development*. No.1, 24-28.

Singh, S.; J.Y. Owusu; and I.H. Shah (eds.). 1985. *Demographic Pattern in Ghana: Evidence for the Ghana Fertility Survey 1979-80*. Voorburg: International Statistical Institute.

Staniland, Martin. 1975. *The Lions of Dagbon: Political Change in Northern Ghana*. Cambridge: Cambridge University Press.

Tait, David. 1954. "Social Change in the Northern Territories of the Gold Coast." Paper prepared for the Department of Sociology. Ghana: Legon University.

USAID. 1996. *Ghana: USAID Country Strategy FY 1997 -2001*. Accra: USAID.

Wolf, Joyce and Mihira Karra. *Education's Impact on Girls: Five Generations of an Indian Family*. Advancing Basic Education and Literacy Project. Washington: USAID.

World Bank. 1996. "Basic Education Improvement Project." Report.